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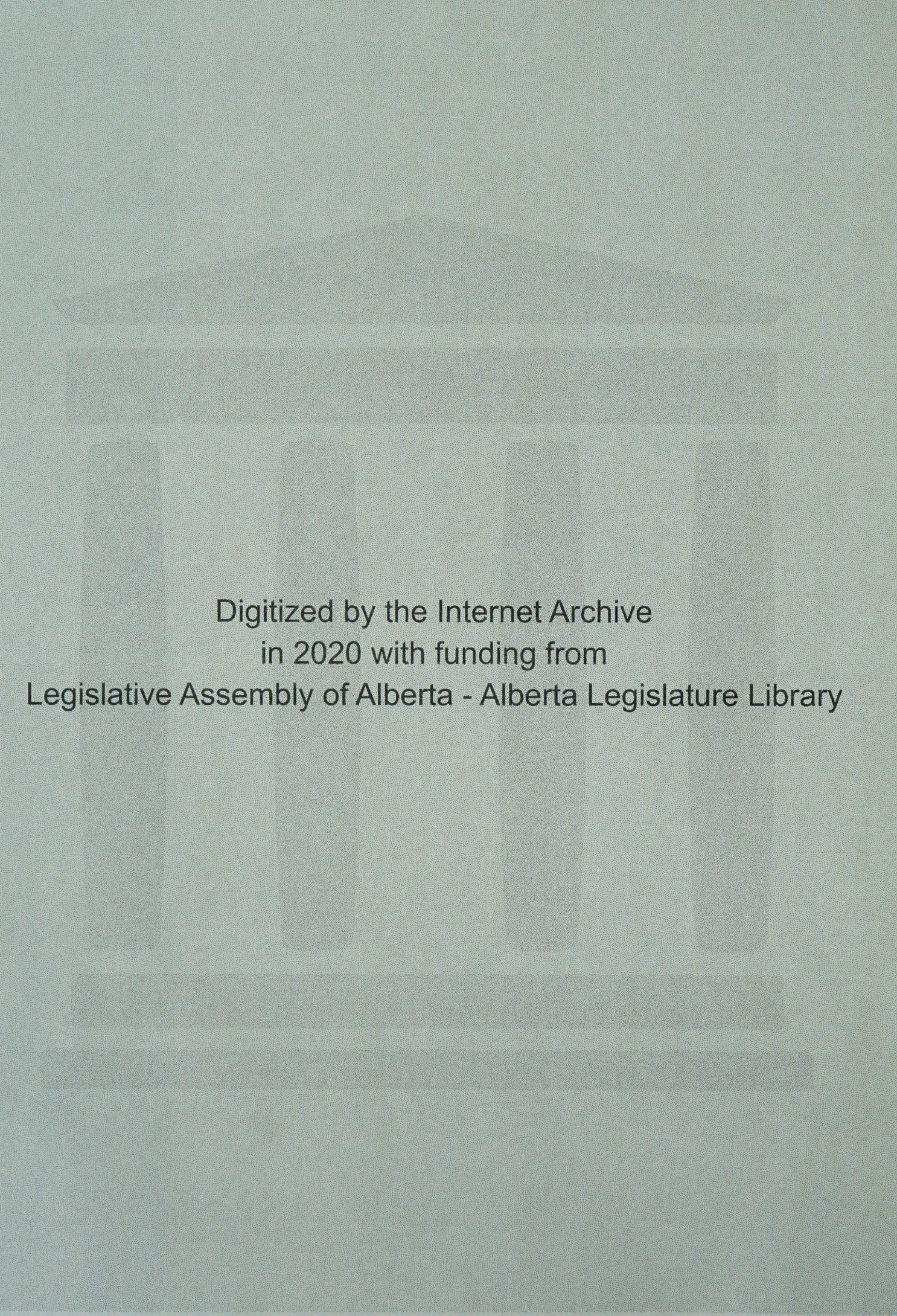
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ANNUAL REPORT
OF THE
Department of Public Health
PROVINCE OF ALBERTA
INCLUDING
Vital Statistics Branch
1931

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
Printed by W. D. McLean, King's Printer
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Edmonton, December 22, 1932.

To His Honour

W. D. WALSH,

Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to transmit herewith the Annual Report of the Department of Public Health for the year 1931.

I have the honour to be, Sir,

Your obedient servant,

GEORGE HOADLEY,

Minister of Health.

Edmonton, December 22, 1932.

TO THE HONOURABLE GEORGE HOADLEY,
Minister of Health,
Parliament Buildings, Edmonton, Alberta.

SIR,—

I have the honour to submit herewith the Thirteenth Annual Report of the Department of Health.

I have the honour to be, Sir,

Your obedient servant,

MALCOLM R. BOW, M.D., C.M., D.P.H.,
Deputy Minister.

THIRTEENTH ANNUAL REPORT OF THE PROVINCIAL DEPARTMENT OF PUBLIC HEALTH, INCLUDING THE VITAL STATISTICS REPORT

THE DEPARTMENT

Divisions:

1. Communicable Diseases.
2. Public Health Education.
3. Hospital Inspection.
4. Laboratory.
5. Public Health Nursing.
6. Municipal Hospitals.
Charity and Relief.
7. Social Hygiene.
8. Sanitary Engineering and Sanitation.
9. Dental Hygiene.
10. Mental Health.
11. Institutions: Provincial Mental Hospital, Ponoka.
Provincial Mental Institute, Oliver.
Provincial Training School, Red Deer.
Psychopathic Ward, University Hospital.
Central Alberta Sanatorium, Calgary.
12. Vital Statistics.

A report giving a summary of the work of each of these divisions is included herewith.

THE ADVISORY COMMITTEE OF HEALTH.

The Advisory Committee of Health met on January 27, 1931, with the following members in attendance:

- Mrs. O. C. Edwards, Macleod, representing Urban Women.
- Mrs. J. H. Field, Spurfield, representing Rural Women.
- Dr. W. A. Wilson, Edmonton, representing the Medical profession at large.
- Dr. Geo. R. Johnson, Calgary, representing the College of Physicians and Surgeons.
- Dr. A. F. Anderson, Edmonton, representing General Hospitals.
- Dr. J. J. McPherson, Castor, representing Rural Physicians.
- Dr. E. Pope, Edmonton, representing the Faculty of Medicine, University of Alberta.
- Mr. A. T. Stephenson, Red Deer, representing Municipal Hospitals.
- Mrs. R. J. Gaunt, Edmonton, representing the Nurses.
- Mr. H. E. G. H. Scholefield, Calgary, representing Rural Laymen.
- Mr. E. Roper, Edmonton, representing Urban Laymen.
- Dr. M. R. Bow, Deputy Minister of Health, Chairman.

The following questions were discussed by the Committee:

- Amendments to Hospital Regulations.
- New Developments in Departmental Work.
- Report on the Work of the Red Deer and Okotoks-High River Health Units.
- Medical Examination of Rural School Children.
- Pasteurization of Milk.
- Public Health Education.

Resolutions were adopted by the Committee relating to the Provincial Hospital Regulations, in regard to the need of provision being made for the physical examination of rural school children by qualified physicians, endorsing the resolution adopted by the Central Alberta Medical Association requesting that assistance in organization and financial aid be extended by the Province to the various local health authorities to enable them to arrange for the tuberculin testing of all cows producing milk which is offered for sale. A resolution was adopted by the Committee supporting the request of the Secretary-Treasurer of the Municipal District of Peace No. 857 that provision 145 of The Municipal Districts Act relating to portions thereof be embodied in Section 157 of the same Act.

REGULATIONS PASSED DURING THE YEAR

Additions to the Public Health Regulations re Trachoma—August 31, 1931.

LEGISLATION PASSED DURING THE YEAR

The Hospitals Act Amendment Act, 1931.

The interpretation of "home for incurables" has been struck out and the following substituted:

"A place other than a hospital" shall mean any institution approved of by the Minister for the reception of persons suffering from incurable diseases or persons incapacitated by reason of advanced age.

The Lieutenant Governor in Council may prescribe regulations respecting the management, maintenance, operation and accommodation of:

- (a) any approved hospital receiving a per diem allowance under this Act, and the conditions on which such per diem allowance may be made;
- (b) any approved hospital not receiving a per diem allowance under this Act;
- (c) any place other than a hospital caring for patients suffering from incurable diseases, or persons incapacitated by reason of advanced age.

The power to prescribe regulations as to private hospitals has been struck out.

The definition of resident has been changed to read:

"Resident" means any person who has had his home within the area controlled by the local authority for at least three successive months of the six months immediately preceding the application for placing such person in a hospital; and any person not having had a home as last aforesaid, who has been a sojourner within the area controlled by the local authority for at least three successive months of the six months immediately preceding the date of the application for placing such person in a hospital;

Provided always that any such person had at the date of such application no permanent home elsewhere than in the Province.

Any member of the council and the secretary-treasurer of the council may sign and issue written orders on behalf of the local authority of which he is a member or by which he is employed.

Subsections (8) and (9) of Section 7 of the Act have been struck out and the following substituted:

(8) "When a local authority has entered into a contract with any hospital for the accommodation and care of indigent persons within its area and such contract has been approved by the Minister, and any such indigent person is accommodated and cared for in any hospital other than the contracting hospital, the last mentioned hospital shall be entitled

to recover from the local authority for the accommodation and care of such indigent the same amount as would have been payable by the local authority to the hospital with which it had entered into a contract as aforesaid, if such indigent had been accommodated and cared for in that hospital."

Provided that a hospital board shall only be entitled to the benefit of this section if it notifies the local authority it seeks to make chargeable in writing of the accommodation and care of such indigent person as soon as is reasonably possible with use of ordinary diligence and having regard to all the circumstances of the case.

In the event of any dispute arising as to the meaning or effect of any contract, or whether the contracting hospital is unable or has failed to provide adequate suitable care or treatment as is provided for by any contract made with it, or as to whether any circumstances are or are not of sudden or urgent necessity, or as to whether or not any person is or is not an indigent within the meaning of this section, or as to whether a person is a resident of the area of a local authority, the Minister may determine all questions involved in any such dispute, and his decision thereon shall be final.

Admission to an approved hospital not receiving a per diem allowance under this Act or to a place other than a hospital shall be by contract between the local authority of the area of which the person is a resident and such approved hospital or place other than a hospital to which the person is admitted, and any contract so made and approved of by the Minister shall be valid, notwithstanding any other provision of this Act or any other Act or limitation as to charges contained therein.

The Municipal Hospitals Act, 1929, Amendment Act, 1931.

An amendment increases the number of ratepayers required for a petition for the establishment of a hospital district from ten per cent. to twenty-five per cent.

A nominated agent of a corporation which is a ratepayer shall be deemed a ratepayer until he ceases to be a resident or until the corporation nominates some other person in his stead.

Provision is made that a Board may enter into an agreement with one or more qualified medical practitioners for the providing of medical services to the residents of the hospital district, either without charge or at such a rate of payment as may be fixed in the agreement, and every such agreement shall provide for the payment by the district of a remuneration payable to the medical practitioner or practitioners for the services to be rendered, and shall specify the area in which and the term during which such services are to be rendered.

Power is given the returning officer to appoint deputy returning officers and polling places for each division.

The Minister is given authority to make an addition to a hospital district upon receipt of a petition signed by sixty per cent. of the resident ratepayers of the additional area.

Upon any addition being made to the district the Board may for the purpose of providing additional hospital accommodation and equipment issue debentures in addition to existing debentures, to an amount which bears the same proportion to the amount of the debentures it was authorized to issue before such addition, as the area of such addition bears to the area of the district before the making of such addition.

An amendment makes the wife or husband of any person who is eligible for election as member of the board, also eligible.

The amount which may be paid to a representative of a contributing council for attending board meetings is limited to ten per cent. of the contribution of that council.

The Board is given power to borrow against the full amount for which it has made a requisition.

The Board with the consent of the Minister may borrow on the security of accounts receivable.

Provision is made for the payment of the proper expenses of an official administrator.

The Mental Diseases Act Amendment Act, 1931.

The amending Act divides the Act into two parts, of which Part I is of general application and Part II contains special provisions relating to the management of psychopathic wards.

The time for which a patient may be temporarily permitted to leave a hospital is extended from three days to ten days.

The Act contains special provisions as to the conditions under which persons may be admitted to, detained in, or released from psychopathic wards, provides for the appointment of a Commissioner of Mental Institutions and Director of Mental Health and defines his duties.

TABLE No. 1

DEPARTMENT OF PUBLIC HEALTH.
FINANCIAL STATEMENT FOR THE FISCAL YEAR ENDING
MARCH 31st, 1932

Div. Vote.	Name.	Salaries.	Expenses.	Revenue.
1. 605.	Communicable Diseases	\$ 4,250.00	\$ 11,342.52	\$ 2,068.23
2. 602.	Public Health Education	3,400.00	1,450.38	.....
3. 603.	Hospital Inspection	4,817.40	1,027.92	370.00
	Grants		421,621.00	.....
4. —	Laboratory .....			.....
5. 606.	Public Health Nursing and Clinics....	42,322.09	25,709.67	6,004.86
6. 608.	Municipal Hospitals	3,884.25	1,272.41	543.60
	Charity and Relief	3,061.10	51,522.87	.....
7. 610.	Social Hygiene	9,270.35	8,980.33	6,504.21
8. 605.	Sanitary Engineering and Sanitation..	11,968.78	20,675.24	1,006.69
9. —	Dental Hygiene .....			.....
10. 622.	Mental Health	8,291.29	12,339.81	.....
11. —	Institutions:			
	614. Provincial Mental Hospital, Ponoka..	232,528.56	152,670.80	146,350.07
	612. Provincial Mental Institute, Oliver..	74,746.69	35,344.15	29,849.16
	613. Provincial Training School, Red Deer	51,160.90	25,239.44	38,371.17
	622. Psychopathic Ward, University			
	Hospital		9,750.00	3,520.60
	604. Central Alberta Sanatorium, Calgary..	118,910.10	71,351.04	118,869.82
	University Hospital		20,000.00	.....
12. 607.	Vital Statistics	15,719.30	11,023.38	37,407.62
	Grants to Homes		3,500.00	.....
	Administration	14,662.85	5,268.20	687.93
		<u>\$648,993.66</u>	<u>\$890,089.16</u>	<u>\$391,553.96</u>
	TOTAL—Public Health Administration		\$1,539,082.82	
	TOTAL—Public Health Revenue			391,553.96
	TOTAL—Public Health Net Cost			<u>\$1,147,528.86</u>

GENERAL HEALTH CONDITIONS

In spite of the very difficult economic situation, the favourable health conditions experienced in 1930 were even more pronounced during the year 1931. From a public health point of view, 1931 was a record year in many respects. Reference to the Vital Statistics report indicates that in 1931 the lowest death rate in the history of the Province was recorded (7.2 deaths per 1,000 population); 5,302 deaths, 5,142 marriages and 17,252 births were registered in 1931. The birth rate was 23.57 per 1,000 as compared with 26.71—the rate for 1930. There was a lower incidence of practically all of the acute communicable diseases. The combined death rate (deaths per 100,000 population) for Diphtheria, Scarlet Fever, Measles and Whooping Cough was 9.8 as compared with 20.8, the average rate for the last five years.

In recent years there has been a marked reduction in the number of cases and in the number of deaths from Diphtheria, as the following table indicates:

Year.	Cases.	Deaths.	Death Rate.
1922	732	121	20
1923	832	82	14
1924	758	100	17
1925	395	62	10
1926	260	60	10
1927	235	18	3
1928	485	50	8
1929	578	64	10
1930	269	30	4.5
1931	151	25	3.6

Diphtheria is almost entirely preventable. If our people will only avail themselves of the protection which science has placed in our hands, this disease can be practically eliminated as a cause of death. The toxoid required for immunization purposes is supplied free of charge by the Department. While the larger cities and some of the towns and rural districts have conducted well organized immunization campaigns in recent years, there are still many towns, villages and rural districts in which nothing has been done to protect the children. In such districts outbreaks of Diphtheria and deaths from this disease will occur sooner or later.

Twenty-seven cases of Smallpox were reported during the year, and one death occurred from this disease. While Smallpox did not present any problem in 1931, the fact that we have a large unvaccinated population in Alberta gives us cause for real concern. It has been demonstrated over and over again that Smallpox can only thrive in unvaccinated communities. There should not be a single case of this entirely preventable disease in an enlightened community, much less loss of life from this cause. Most of our outlying districts enjoy much better protection against Smallpox than our urban and rural municipalities. During the year 1931, 2,062 individuals in the more outlying districts were vaccinated by one of the inspectors devoting part of his time to this work.

Typhoid Fever cases to the number of 43 were reported, and 16 deaths occurred from this disease in 1931, giving us a typhoid rate of 2 per 100,000 population. Contaminated water supplies particularly in the irrigated districts were responsible for most of our typhoid infection in 1931. Water supplies drawn from streams and irrigation ditches must be regarded as contaminated, and the water from such sources must be chlorinated or boiled before being used if the menace of Typhoid Fever in these districts is to be removed.

The year 1931 was one of comparative freedom from outbreaks of Influenza of the more serious type. However, 192 deaths were ascribed to Influenza and 416 deaths to Pneumonia (all forms).

Each year the death rate from the respiratory infections goes up as the windows come down. In our climate over-heated homes, offices and schools, in which little or no provision has been made for ventilation and humidification, constitute a serious menace to health.

Tuberculosis was reported as the cause of 385 deaths in Alberta in 1931. Of this number 310 were deaths from Pulmonary Tuberculosis. The death rate from all types of Tuberculosis was 52.5 per 100,000 population and from the pulmonary type of the disease 42.5. Excluding the Indian population, which numbers approximately 13,500, the total number of deaths from all forms of Tuberculosis was 219, and the death rate per 100,000 population 29.9. The very high incidence of and the high death rate from Tuberculosis among the Indian population constitutes a problem of major importance to the public health. The most important problem with which we are confronted in regard to Tuberculosis is the lack of adequate accommodation in the Sanatorium. The total number of beds now available is 210. In the past it has been considered by authorities that one bed for each yearly death occurring from the disease is the minimum accommodation required, but recent experience indicates that if an effective state-wide plan of Tuberculosis

prevention and control is to be applied, 2.5 beds for each yearly death from the disease are necessary. In view of the length of time patients requiring sanatorium treatment now have to wait for accommodation and in view of the risk of infection to other members of the family and to the community where such patients remain at home, this is the most urgent public health problem with which we are now faced.

Cancer.

There were 441 deaths from Cancer in 1931, giving a Cancer death rate of 60. The number of deaths and the death rate from this disease for the period 1922 to 1931 is shown in the following table:

Year.	Deaths.	Death Rate (per 100,000 pop.)
1922	322	53
1923	293	47
1924	348	55
1925	341	57
1926	356	59
1927	420	68
1928	415	66
1929	452	70
1930	482	73
1931	441	60

In practically all civilized countries there has been a marked increase in the Cancer death rate in recent years. The Cancer death rate in Alberta and the other prairie provinces is considerably lower than that in the Eastern provinces, largely because of the lower age distribution of our population. The rate in Alberta for 1931 was the lowest in Canada, the highest rate in any province was 116, and the average rate for Canada was 92. During the year a committee was appointed by the Executive of the Alberta Medical Association to make a study of the Cancer situation. This committee has been organized as Northern and Southern Sections, and a number of meetings of each of these sections have been held. The recommendation of the Cancer Committee that a Cancer questionnaire be sent to each physician in active practice for the purpose of securing as complete information as possible concerning cases of Cancer which have come under observation and treatment and the further recommendation that the Provincial Department of Health be requested to make Cancer a notifiable disease were endorsed by the Alberta Medical Association at the annual meeting in Calgary.

The Department has co-operated closely with the Association in connection with this Cancer survey, and splendid co-operation has been given by the physicians and hospitals of the Province in completing the questionnaires, 732 of which have been returned to the Department. A summary of these returns is now being prepared. In the course of time, as the information submitted is more complete, data of great value in the study of the Cancer problem should be available from these returns.

Infantile Mortality Rate.

The number of deaths of children under one year of age in 1931 was 1,197, giving an infantile mortality rate of 69.4 (deaths under 1 year of age per 1,000 living births). This rate, while somewhat higher than the rate for 1930 (63.5), is materially lower than the rate for previous years. The rate for the rural districts and for the towns and villages of the Province is, generally speaking, much

higher than the rate for the larger cities in which efficient full-time service of modern health departments is available. In 1931 the average rate for the rural districts was 75.4 and for the cities of the Province 57.4. Of the deaths of children under one year of age, 647 deaths occurred within the first month of life and 428 within the first week. There were 141 deaths of children under one year of age from Diarrhoea, 249 deaths from respiratory infections (including Influenza), and 34 deaths from acute contagious diseases. The urgent need for well organized local health service in our rural districts and in our small urban centres becomes evident when one studies the causes of infantile deaths in such areas. It is quite conservative to say that if an effective preventive health service were available in all sections of the Province, the number of infant deaths would be reduced by one-third. This would mean a saving of approximately 400 lives each year.

Maternal Mortality.

There were 87 deaths of mothers from conditions associated with childbirth in 1931. This means that for every 1,000 children born during the year five mothers died. This is the lowest rate recorded in recent years. The rate for each of the years from 1927 to 1931 was as follows:

Year.	Rate.
1927	6.4
1928	6.8
1929	7.3
1930	6.5
1931	5.0

While the maternal mortality rate for Alberta and the other provinces was, generally speaking, considerably lower in 1931, our rate is almost double that of Norway, Sweden and Denmark, in which countries each year a rate below 3 is recorded. Social, economic and many other factors enter into the situation in respect to maternal mortality. Perhaps the most urgent need in so far as our situation is concerned is more adequate facilities for pre-natal care, particularly in our rural districts.

FULL-TIME HEALTH DISTRICTS

The Red Deer and the Okotoks-High River Full-Time Health Districts, the organization of which was completed in 1930, were established in 1931 and the service instituted on June 1st.

The Red Deer district embraces the City of Red Deer, Municipal Districts Nos. 400, 399, 339, 371 and 340, and the following towns and villages: Lacombe, Blackfalds, Eckville, North Red Deer, Sylvan Lake, Innisfail, Penhold and Bowden.

The Okotoks-High River district embraces Municipal Districts Nos. 189, 191, 158, 159, Improvement District No. 160, and the following towns and villages: High River, Blackie, Okotoks, Vulcan, Nanton, Cayley, Turner Valley and Black Diamond.

The staff of each of these health districts is composed of a medical officer of health, who has received special training in public health work, through the courtesy of the Rockefeller Foundation in awarding Fellowships for this purpose, a well qualified public health nurse, a graduate nurse, who has received special training in laboratory work, and a stenographer, who has charge of clerical work and records. In addition, the time of an experienced

sanitary inspector is divided between the two districts. The District Board of Health, composed of one representative from each of the municipalities included in the health district, is responsible for the administration of the unit, the Department acting in an advisory capacity. Each of the district boards of health has taken a keen interest in the development of the service, and each has been fortunate in securing the services of a well trained, enthusiastic and efficient staff.

The establishment of these districts marks an effort to demonstrate the value of a full-time preventive service in dealing with the health problems of our rural districts and small urban centres.

The budget of each Health District is \$10,000.00 per year, of which amount the Provincial Department is contributing 50% and the Rockefeller Foundation 25%.

The following is a brief summary of the work carried on in each of these health districts for the period during which they were in operation—June 1st to December 31st, inclusive:

	Red Deer.	High River
EDUCATIONAL:		
Lectures	27	22
Attendance	1,645	1,193
Bulletins Distributed	11,830	1,272
Newspaper Articles	8	48
Letters (including circular letters)	1,052	368
Reports (including notification of defects)	1,454	66
Conferences attended	17	1
Health talks prepared	16	—
SANITARY INSPECTIONS:		
Private premises	16	98
Public premises	35	32
Dairies	65	21
Creameries and Ice Cream Factories	27	18
Hotels, Restaurants, Soda Fountains	60	66
EXAMINATIONS:		
Life Extension	116	39
Other examinations	2	35
CONTROL OF ACUTE COMMUNICABLE DISEASES:		
Visits to cases, contacts, suspects	106	52
Cases isolated	82	46
IMMUNIZATION:		
Anti-Smallpox	115	67
Inspections of Vaccinations	105	—
Toxoid Inoculations	—	1,203
CHILD HYGIENE:		
Infants examined	80	174
Pre-school children examined	90	272
Number of schools visited	96	111
School children examined	2,145	779
School children found defective	1,731	580
School children found under-weight, 10%	446	126
Follow-up visits (Home)	71	69
LABORATORY:		
Urinalyses	73	20

PUBLIC HEALTH EDUCATIONAL WORK

Our public health educational work was carried on along much the same lines as in previous years. By means of lectures, exhibits, demonstrations, health bulletins and radio talks an effort has been made to stress the importance of and the need for preventive service. A feature of the educational programme this year was the arrangement made for lectures to women and senior girls at 54 centres of the Province on "The Hygiene of the Period of Adolescence." The lectures were given by Dr. Margaret Owens during the first three months of the year, and great interest was manifested at the various centres on the itinerary. This lecture-itinerary was undertaken with the co-operation of a number of the women's organizations of the Province.

There is an increasing demand for health educational service which the Department is endeavoring to meet as far as possible, recognizing that this is perhaps the most productive field in public health.

PUBLIC HEALTH NURSING AND CHILD WELFARE

A public health nurse is in charge of each of the following Child Welfare Clinics: Edmonton, Calgary, and Medicine Hat, and local physicians who devote special attention to pediatrics are in attendance at these clinics each week. At these child welfare clinics some 15,000 children were examined during the year and 12,000 home visits were made by the nurses in charge. Nearly 4,000 infants and pre-school children were examined by the staff of the Travelling Child Welfare Clinic.

A public health nurse is stationed in each of the following Municipal Districts: Norma No. 515, with Vegreville as a centre; Marquis No. 157, with Milo as a centre; and Richdale No. 274, with Stanmore as a centre.

In these districts a generalized public health nursing service is being rendered. In each of these centres a child welfare clinic has been established, and in each district a keen interest has been shown in this work. In districts in which there is not sufficient concentration of population to make the establishment of full-time health units feasible, the placing of thoroughly qualified public health nurses to serve two rural municipalities and the towns and villages included therein would provide an excellent type of service.

Nine of the outlying districts of the Province are served, two by district physicians and seven by district nurses. These districts are as follows: Worsley, Notikewin, Wanham, Valley View, Jarvie, Kinuso, Slave Lake, Pendryl and Peers. During the year the work of the Slave Lake and Kinuso districts was consolidated, and the new district of Worsley was established. The staff serving these outlying districts is required to possess a high degree of courage, initiative and skill in dealing with the difficult problems often experienced in pioneer communities remote from hospital and medical service. A detailed statement of the work of the Public Health Nursing Division is submitted in the report of this division.

SOCIAL HYGIENE

A feature of the work of the Social Hygiene Division which is of special interest from the preventive viewpoint is the attention given to early detection of neurosyphilis. By giving adequate treatment at once to patients in whose cerebro-spinal fluid the laboratory examinations indicate changes indicative of neurosyphilis, it is hoped the disastrous consequences of the development of clinical neurosyphilis may be obviated. It is our policy to give the malaria pyrexia treatment to all such cases. During the year 326 cerebro-spinal fluids were examined, and of these 45 were found to be positive—indicating that the nervous system is affected in about 13.8% of our syphilitics. If as a result of early recognition and prompt treatment these cases can be prevented from becoming institutional charges, our policy in this connection will effect an enormous saving to the Province. The total number of cases of syphilis under treatment at all clinics during 1931 was 878, and the

total number of cases of gonorrhoea 1,031 as compared with 444 cases of syphilis and 818 cases of gonorrhoea under treatment in 1930. The increase in the number of cases of both syphilis and gonorrhoea under treatment in provincial clinics in 1931 is considered to be largely due to economic conditions. Many patients who had formerly been treated by private physicians are now without the means to continue private treatment and have become clinic patients.

THE PROVINCIAL LABORATORY

Some idea of the great service to public health rendered by the Provincial Laboratory is given in the review of the work of the Laboratory submitted by Dr. Allan C. Rankin, Provincial Bacteriologist. During the year 1931, 57,245 examinations were carried out—an increase of 6,898 examinations over the previous year.

The work of the Provincial Laboratory embraces the examination of water, ice, sewage, milk, the examinations required in connection with communicable disease control in tuberculosis, diphtheria, typhoid fever, syphilis, gonorrhoea and other communicable diseases, the examination of pathological material submitted by hospitals, chicken and cattle blood examinations, medico-legal examinations, post mortem examinations, and many other examinations which the Laboratory carries out for physicians and local boards of health, free of charge. In addition to this service, vaccines and sera are prepared and distributed by the Laboratory. All convalescent serum used in the treatment of poliomyelitis (Infantile Paralysis) is prepared in the Provincial Laboratory. In addition, research work relating to bovine tuberculosis has been carried on under the direction of Dr. Rankin for a number of years. The commercial value of the public health service rendered by the Laboratory in 1931, if only minimum charges were made, was \$136,019.07.

SANITARY ENGINEERING AND SANITATION

The plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants as required under the Public Health Act were examined, and where approval was given certificates have been issued. A statement of the works for which certificates have been issued is submitted in the report of the Sanitary Engineering Division. The vital importance of the necessary action being taken by municipalities to ensure the safety of public water supplies has been stressed. There are, however, some districts which have not yet acted on the recommendations of the Department, and it cannot be too strongly emphasized that to depend on untreated water drawn from running streams as a source of supply is extremely hazardous, and constitutes a serious menace to the health and lives of the citizens in such districts.

Much useful work was accomplished by the sanitary inspectors in the inspection of 232 health districts and 33 lumber, tie, sawmill and mining camps. Since the establishment of the two full-time health districts the services of one of the sanitary inspectors have been divided between the Department and the health districts, one-third of his time being devoted to the work of the Department and

two-thirds to the health districts. There is a great need for the expansion of this service as soon as financial conditions will permit.

HOSPITAL INSPECTIONS

There are 91 approved hospitals in the Province in receipt of the Government Grant. Seventy-four private hospitals were licensed under the provisions of The Private Hospitals Act, of which 19 were baby shelters. All hospitals were inspected during the year with the exception of isolation hospitals, which were closed on the occasion of the hospital inspector's visit to the district, and four hospitals in remote districts. The management and the staffs of the various approved hospitals have given excellent co-operation in carrying out the requirements of the Hospital Regulations. Arrangements were made this year to have Dr. R. Proctor, Radiologist of the University Hospital, accompany the inspector of hospitals on his visits to the hospitals in the northern part of the Province for the purpose of inspecting the facilities for X-ray work, making recommendations to the hospitals, and instructing the technicians doing this work as to how improvements might be obtained in their results. It is hoped that we may be able to extend this service to include all hospitals, in order that the best results may be obtained with the equipment in use. As soon as financial conditions permit, the Department proposes to set a standard of qualifications for all technicians employed in X-ray and Laboratory work.

The total bed capacity of all hospitals in the Province, including the Central Alberta Sanatorium, is 4,495, divided as follows:

General	2,496
Maternity	625
Children	256
Infants	527
Isolation	290
Tuberculosis	301

This gives one bed for every 163 of the population, or 6.1 beds per 1,000 population; 67,010 patients were treated during the year, which represents 9.1% of the population. Excluding the Sanatorium, Junior Red Cross and S.C.R. cases—which are, generally speaking, long treatment cases—the average days' stay in hospital was 11.1 days. The average cost per patient day, excluding capital charges, was \$3.35, as compared with \$3.51 for the year 1930. Present economic conditions have made it most difficult for the hospitals, but a valiant effort is being made to give the most efficient service possible at the minimum cost. Other statistics of interest will be found in the report of the Hospitals Division.

MUNICIPAL HOSPITALS

Twenty-two municipal hospitals were in operation in 1931. No new municipal hospital districts were established during the year, but additional territory was taken in by eight municipal hospitals. There are 735 beds (including 126 bassinets) in the municipal hospitals, and 15,573 patients were treated in these hospitals during the year. While the municipal hospitals have experienced many difficulties in carrying on under present economic conditions with the low level of prevailing prices for the products of the farm, the various boards have faced their problems with courage and a determination to carry on and give the best service possible with the funds available.

THE TRAVELLING CLINIC AND THE DENTAL CLINIC

The Travelling Clinic operated in 1931 as in previous years, but the itinerary was reduced, so that this clinic was only in the field this year from June 1st to September 16th. Many districts requesting the service could not be served in the time available. In planning the itinerary an effort is made each year to visit districts which have not been served in the previous year or two, and to make the service available in districts where there appears to be the greatest need. Two hundred and ten districts were served from the 21 clinic centres established in 1931; 4,707 children were inspected by the survey nurses, 3,179 children were examined by the clinic physicians, and 676 operations for removal of tonsils and adenoids were performed, and 69 minor operations were performed. After the completion of the itinerary, a Dental Clinic was sent north to serve a number of districts from which urgent requests for such service had been received. The staff of the Dental Clinic, which operated from five centres, consisted of one dentist, one physician and one nurse.

CENTRAL ALBERTA SANATORIUM

In addition to the treatment of sanatorium patients, the medical staff of the Sanatorium provides the diagnostic service for the weekly clinics held at the Sanatorium and in Calgary, as well as for the clinic held fortnightly in Edmonton. In addition, a special five-day clinic was conducted in Medicine Hat serving the city and districts adjacent thereto, at which 185 persons were examined, and a five-day clinic was also conducted at the Blood Indian Reserve, Cardston, at which 234 persons were examined. Twenty-seven centres were visited by the travelling diagnostician, and 339 persons examined. A total of 1,608 persons were examined at all clinics, and 135 new cases of tuberculosis were diagnosed in this department. This is a service of far-reaching importance to the public health, but its usefulness is greatly impaired because of the lack of Sanatorium accommodation.

During the year 407 patients received institutional treatment, and the average patient strength was 204; 203 patients were admitted during the year, of which 102, or 50%, had a positive sputum on admission. The same high standard of service has been maintained by the staff as in previous years. The per diem cost of treatment has been reduced from \$2.67 for 1930 to \$2.49 for 1931.

MENTAL HEALTH DIVISION

The year 1931 has marked important developments in connection with the work of the Mental Health Division of the Department, under the able direction of Dr. C. A. Baragar, Commissioner of Mental Institutions and Director of Mental Health.

The Psychopathic Ward, providing accommodation for 16 patients in the south wing of the University Hospital, was opened for the reception of patients on January 29th. The opening of this ward marks an effort to provide accommodation for the care and treatment of early cases of mental disorder and more especially of those who may, as a result of early treatment, be discharged re-

covered or so improved in health as to render admission to a mental hospital unnecessary. This ward also provides facilities for the observation and treatment of patients in order to determine in what type of institution such patients may be cared for to the best advantage. It also serves as a centre for the examination of special out-patient cases referred for the opinion of a psychiatrist.

Ninety-three patients were admitted during the year, of which 47 were men and 46 women; 78.5% were voluntary admissions. The great majority of patients were referred by physicians.

MENTAL HYGIENE CLINICS

Three clinics have been established—the first in Edmonton in August, 1929, the second in Calgary in October, 1929, and the third in Lethbridge in November, 1930. The clinic in Edmonton is held weekly, in Calgary fortnightly, and in Lethbridge every fourth week. The purpose in establishing these clinics was to provide centres to which early mental cases, cases presenting behavior problems in the school or in the community and other such cases could be referred for examination to those competent to advise as to the proper course to follow in dealing with the various problems such cases present.

There has been a steady increase in the work of the clinics since their inception. New cases have increased from 52 in 1929 to 142 in 1930 and to 354 in 1931, while the cases dealt with as follow-ups either at the clinic or by the social worker in the field have increased from 50 in 1930 to 331 in 1931. The service provided by these clinics has met a real need, and has been very sympathetically received by the people. It is hoped that financial conditions will not long delay the extension of this service to other districts.

STAFF CHANGES IN MENTAL INSTITUTIONS

During 1931 a number of important changes in personnel have occurred.

After nineteen years' service to the Province, sixteen of which he served as head of the Provincial Mental Hospital at Ponoka, Dr. E. H. Cooke resigned on August 15, 1931, on account of ill-health.

Dr. C. P. Fitzpatrick, who served as a member of the medical staff of the Provincial Mental Hospital at Ponoka from January 1, 1924, to May 31, 1929, and as Medical Superintendent of the Provincial Mental Institute at Oliver from June 1, 1929, to July, 1931, and as Director of the Mental Hygiene Clinics from their inception, also resigned during the year through ill-health.

Dr. W. J. McAlister, Medical Superintendent of the Provincial Training School, Red Deer, was appointed Acting Medical Superintendent of the Provincial Mental Institute, Oliver, and took charge in July, and Dr. D. L. McCullough, Assistant Superintendent at the Provincial Mental Hospital, Ponoka, took charge as Acting Superintendent of the Provincial Training School, Red Deer.

Following the resignation of Dr. Cooke, Dr. C. A. Baragar was appointed Acting Superintendent of the Provincial Mental Hospital at Ponoka.

In September, Dr. Geo. A. Davidson, a physician with splendid qualifications for this important position, was appointed Assistant Medical Superintendent of the Mental Hospital at Ponoka.

In January, Miss Catherine Lynch, R.N., was appointed Superintendent of Nurses at Ponoka, and Miss E. M. Holmes, R.N., was appointed Matron of the Provincial Training School at Red Deer.

The most important developments of the year at the Provincial Mental Hospital Ponoka, have been the commencement of the reorganization of clinical services and social activities, the inauguration of a post-graduate course in psychiatric nursing, and definite progress in the development of a scheme for the beautification of the grounds.

At the Provincial Mental Institute, Oliver, the year was marked by the completion of construction of the new kitchen-dining room unit, which provides seating accommodation for 375 patients. When this fine new addition is in use, ward accommodation will be available for 75 additional male patients.

By alterations carried out at the Provincial Training School at Red Deer, additional accommodation has been provided for 18 patients, chiefly high-grade girls. This institution with 190 patients is filled to the limit of its capacity, and there is a long waiting list. The problem presented by the large number of mental defectives, many of whom present difficult social problems in the home, school and community, is one which prevailing economic conditions have accentuated.

TABLE No. 2
MOVEMENT OF PATIENTS—MENTAL INSTITUTIONS, 1931

	On Books Jan. 1, 1931		Admissions during 1931		Discharges during 1931		Deaths during 1931		On Books Dec. 31, 1931	
	Insane	Mental Deficients	Insane	Mental Deficients	Insane	Mental Deficients	Insane	Mental Deficients	Insane	Mental Deficients
Oliver	300	17	13	0	10	0	4	0	299	17
Ponoka	1068	36	411	5	253	1	58	2	1168	38
Red Deer	0	180	0	25	0	10	0	5	0	190
Total.....	1368	233	424	30	263	11	62	7	1467	245

THE EUGENICS BOARD

The Sexual Sterilization Act was assented to March 21, 1928, and the first operation authorized by the Board was performed on May 10, 1929. Up to the end of 1931, 134 cases, of which 32 were men and 102 were women, were passed by the Board, and sterilization was authorized subject to certain conditions in certain of these cases. Of the cases in which the operation was authorized, at the end of the year 113 cases had been operated on—23 men and 90 women.

The need for this legislation has been fully demonstrated, and the very careful and efficient manner in which the Board has discharged its responsibilities under the Act has placed this Province in a position of leadership in dealing with this great problem.

Many enquiries have been received from other provinces, and other parts of the Empire, as well as from foreign countries, as to the working of the Act and the progress of the work in Alberta.

PUBLIC HEALTH EXPENDITURES

Included in this report is a statement of expenditures for the fiscal year ending March 31, 1932. An analysis of this statement shows that of the total expenditure of \$1,539,082.82, approximately \$1,350,000.00 was expended for the maintenance and operation of Provincial institutions, for the provision of grants to approved hospitals, for relief purposes and other treatment services. Only \$189,000.00, or 12.6%, of the funds was expended for preventive public health services. This means that out of every dollar expended by the Department in 1931, slightly less than thirteen cents was expended on prevention. The need for the expansion of preventive services, as soon as financial conditions make this possible, is evident, and has been stressed in other sections of this report. Experience has fully demonstrated that funds expended for the development of well-planned and scientifically grounded preventive health services return dividends out of all proportion to the sums invested.

CONCLUSION

In concluding this brief review of the most outstanding phases of the work of the Department for the year 1931, I wish to express my deep appreciation of the splendid co-operation and efficient service given by the heads and the members of the staffs of the various divisions, as well as of the various institutions coming under the direction of the Department. This Department is indeed fortunate in the splendid type of men and women in its service as well as in the fine esprit de corps which exists throughout the service.

All of which is respectfully submitted.

MALCOLM R. BOW,

Deputy Minister of Health.

Communicable Disease Division

(A. C. McGUGAN, M.D., *Director*)

The following table shows the number of cases of communicable diseases which have been reported in the Province of Alberta in 1930 and 1931:

TABLE No. 1

Disease.	1930.	1931.	Disease.	1930.	1931.
Anterior Poliomyelitis	150	23	Mumps	1302	481
Cerebro-spinal Meningitis	28	6	Scarlet Fever	1028	438
Chickenpox	1826	2152	Smallpox	81	27
Diphtheria	269	151	Tuberculosis (Pulmonary)....	136	325
Encephalitis Lethargica	4	1	Typhoid Fever	69	43
Erysipelas	69	54	Paratyphoid Fever	—	2
Rubella (German Measles)....	42	69	Whooping Cough	1246	451
Measles	282	720			

TABLE No. 2

TOTAL DEATHS DUE TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA DURING THE YEAR 1931

Pneumonia (all forms)	410	Erysipelas	14
Influenza (all forms)	186	Scarlet Fever	8
Pulmonary Tuberculosis	306	Encephalitis Lethargica	7
Tuberculosis (all other forms)....	76	Whooping Cough	32
Diphtheria	25	Poliomyelitis	8
Meningococcal Meningitis	9	Smallpox	1
Typhoid Fever	16	Measles	7
Mumps	—		

TABLE No. 3

DEATHS DUE TO COMMUNICABLE DISEASES IN THE CITIES OF EDMONTON AND CALGARY DURING 1931

EDMONTON		CALGARY	
Pneumonia (all forms)	40	Pneumonia (all forms)	46
Influenza (all forms)	28	Influenza (all forms)	9
Pulmonary Tuberculosis	36	Pulmonary Tuberculosis	14
Tuberculosis (all other forms)	14	Tuberculosis (all other forms)	11
Diphtheria	5	Diphtheria	4
Whooping Cough	1	Whooping Cough	1
Poliomyelitis	1	Poliomyelitis	—
Mumps	—	Mumps	—
Meningococcal Meningitis	4	Meningococcal Meningitis	1
Typhoid Fever	1	Typhoid Fever	—
Erysipelas	2	Erysipelas	3
Scarlet Fever	2	Scarlet Fever	—
Encephalitis Lethargica	—	Encephalitis Lethargica	3
Measles	—	Measles	—
Smallpox	—	Smallpox	—

TABLE No. 4

DEATHS DUE TO COMMUNICABLE DISEASES IN THE SMALLER CITIES, TOWNS, VILLAGES AND RURAL DISTRICTS DURING THE YEAR 1931

Pneumonia (all forms)	268	Diphtheria	16
Influenza (all forms)	138	Whooping Cough	27
Pulmonary Tuberculosis	119	Poliomyelitis	7
Tuberculosis (all other forms)....	31	Mumps	—
Meningococcal Meningitis	4	Encephalitis Lethargica	4
Typhoid Fever	15	Measles	6
Erysipelas	8	Smallpox	1
Scarlet Fever	6		

TABLE No. 5

INDIAN DEATHS DUE TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA DURING 1931

Pneumonia (all forms)	56	Meningococcal Meningitis	—
Influenza (all forms)	31	Typhoid Fever	—
Pulmonary Tuberculosis	137	Erysipelas	1
Tuberculosis (all other forms)	20	Scarlet Fever	—
Diphtheria	—	Encephalitis Lethargica	—
Whooping Cough	3	Measles	1
Poliomyelitis	—	Smallpox	—
Mumps	—		

TYPHOID FEVER

43 cases—16 deaths

Most of the cases of typhoid fever reported from the Province have occurred in the irrigated districts. When one's only available source of water supply is the open stream, it is difficult to avoid typhoid and paratyphoid fever. The water should either be boiled or chlorinated.

In the control of this disease it is essential that concurrent and terminal disinfection be carried out thoroughly, and that every case be isolated until at least two negative specimens of the stool and urine have been obtained. In districts where typhoid fever is prevalent every individual should be vaccinated every two years.

SCARLET FEVER

438 cases—8 deaths

The scarlet fever record for the year 1931 is a decided improvement over that of 1930. The disease has continued to appear in a mild form and to spread in some districts because some of the cases have escaped recognition.

SMALLPOX

27 cases—1 death

While there have been a few sporadic cases reported as smallpox in the Province, there have been no epidemics of the disease during 1931. The fact that the disease has not been prevalent during the year is apt to engender a false sense of security. Frequent periodic vaccinations are necessary if the Province is to be freed of this preventable disease.

DIPHTHERIA

151 cases—25 deaths

Our Provincial diphtheria record continues to improve. The disease is a preventable one, and when parents, school authorities and municipal authorities have had every susceptible individual immunized against diphtheria, then we may expect our cases to be limited to the few imported ones.

CEREBRO-SPINAL MENINGITIS

6 cases—9 deaths

Not infrequently types of meningitis other than the meningococcal type are reported in this group, and the case fatality rate is unduly high. However, there have been relatively few cases of this disease in Alberta in 1931.

PULMONARY TUBERCULOSIS

325 cases—306 deaths

The above total of deaths includes deaths among our Indian population. Cases from this group have not been reported. The reporting of pulmonary tuberculosis is still far from complete.

ACUTE ANTERIOR POLIOMYELITIS

23 cases—8 deaths

The incidence of poliomyelitis has been quite low this year. This decline probably is due to the periodic downward curve that follows a year such as 1930, when the morbidity rate was unusually high. An adequate emergency supply of convalescent serum is being kept at various points throughout the Province.

MEASLES

720 cases—7 deaths

After a marked decline in the morbidity rate for measles during 1930, the morbidity curve seems to be again on the up-grade. The experience of those centres where convalescent measles serum has been used extensively shows that the disease may be prevented or its course controlled.

WHOOPIING COUGH

451 cases—32 deaths

The morbidity rate for whooping cough for 1931 was about one-third of the rate for 1930. Whooping cough, both in its course and its complications, is one of the more serious communicable diseases. Early recognition and prompt isolation of cases are our most effective means of control.

TABLE No. 6
A SUMMARY OF THE MORBIDITY AND MORTALITY RATES IN THE MORE
COMMON COMMUNICABLE DISEASES

Disease.	Total Cases.	Total Deaths.	Morbidity Rate.	Mortality Rate.
Anterior Poliomyelitis	23	8	3.2	1.1
Cerebro-spinal Meningitis	6	9	0.8	1.2
Pneumonia (all forms)	—	410	—	56.08
Influenza (all forms)	—	186	—	25.4
Pulmonary Tuberculosis	325	306	44.52	41.8
Pulmonary Tuberculosis (exclu- sive of Indians)	—	169	—	23.1
Diphtheria	151	25	20.7	3.4
Whooping Cough	451	32	61.9	4.3
Smallpox	27	1	3.7	0.1
Typhoid Fever	43	16	5.9	2.2
Erysipelas	54	14	7.3	1.9
Scarlet Fever	438	8	60.0	1.1
Encephalitis Lethargica	1	7	0.1	0.9
Mumps	481	—	65.9	—
Measles	720	7	98.6	0.9

Mr. Zalizniak, health inspector, visited 214 districts, vaccinated 2,062 individuals, immunized 1,688 against diphtheria, made 14 special investigations, and carried on an educational programme in public health work during the year.

WHOOPIING COUGH

Sex		MONTHS												AGES						TOTAL		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	Not Stated
M. F.																						
Cities:																						
Calgary	12	23	1	6	4	3	1	4	5	5	4	—	1	1	2	13	20	—	—	—	—	35
Edmonton	109	115	10	26	14	55	39	25	24	22	8	1	—	1	17	103	103	1	—	—	—	222
Lethbridge	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	
Red Deer	13	9	—	—	—	—	—	—	—	7	7	6	—	2	2	6	14	—	—	—	14	
Towns and Villages	29	46	1	3	5	5	4	5	5	5	12	11	4	20	5	22	46	2	—	—	75	
Rural Districts	62	31	1	11	7	3	15	5	—	8	9	22	11	1	7	33	45	1	—	—	93	
Totals		227	224	14	46	30	66	59	39	29	47	40	40	18	23	33	177	230	4	—	—	451
PULMONARY TUBERCULOSIS																						
Cities:																						
Calgary	35	25	1	10	7	3	4	4	7	6	9	3	4	2	—	—	2	15	38	4	1	60
Drumheller	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Edmonton	36	50	7	11	8	12	16	7	4	5	4	4	5	3	1	—	5	32	40	7	—	86
Lethbridge	3	1	1	—	—	—	—	1	—	—	1	—	1	—	—	—	—	1	3	—	—	4
Medicine Hat	5	8	1	4	1	1	1	—	—	3	—	—	1	1	—	—	1	9	2	1	—	13
Red Deer	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	1
Wetaskiwin	1	2	—	—	—	—	—	—	1	—	—	—	1	1	—	—	—	—	3	—	—	3
Towns and Villages	43	34	5	5	10	4	11	15	6	2	3	3	6	7	—	—	4	24	31	15	1	77
Rural Districts	42	38	5	12	5	6	6	14	5	2	5	3	7	10	—	—	7	29	25	14	3	80
Totals		167	153	20	42	31	26	39	41	23	18	22	14	26	23	1	19	111	143	41	5	325
DIPHTHERIA																						
Cities:																						
Calgary	18	27	3	6	6	1	3	2	5	2	11	4	2	—	—	9	22	5	7	1	1	45
Edmonton	10	18	8	5	2	6	—	1	1	5	—	—	—	—	3	5	11	3	6	—	—	28
Medicine Hat	2	1	—	—	—	1	—	—	—	—	1	—	—	—	—	—	2	1	—	—	—	3
Red Deer	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Towns and Villages	19	16	7	4	—	—	1	4	2	—	1	13	2	1	1	7	21	2	1	—	—	35
Rural Districts	24	15	13	3	3	2	7	3	1	3	3	1	—	—	—	9	15	4	2	1	—	39
Totals		73	78	32	18	11	10	11	11	9	10	16	18	4	1	4	30	71	16	2	1	151

1931

DEPARTMENT OF PUBLIC HEALTH

MEASLES

1931	Sex		MONTHS												AGES						TOTAL		
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59		60-69	Not stated
	M.	F.																					
Cities:																							
Calgary	16	28	—	2	4	1	3	4	3	7	2	2	5	11	—	16	23	4	1	—	—	—	
Edmonton	16	15	12	6	—	2	2	2	—	1	—	—	1	5	7	12	8	3	1	—	—	—	
Lethbridge	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	
Medicine Hat	175	199	40	194	138	2	—	—	—	—	—	—	—	—	1	42	316	13	2	—	—	—	
Wetaskiwin	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	
Towns and Villages	86	95	6	38	47	34	34	19	—	—	1	1	1	—	2	33	138	6	—	1	—	—	
Rural Districts	39	49	2	28	15	8	5	24	—	4	—	—	—	2	5	7	67	7	1	1	—	—	
Totals	333	387	61	268	204	47	44	49	3	12	3	4	7	18	15	111	553	33	5	2	—	1	

GERMAN MEASLES

Cities:																						
Calgary	10	11	—	2	—	1	—	3	—	—	—	—	1	14	—	2	17	2	—	—	—	—
Drumheller	1	—	—	1	—	—	—	—	1	—	1	—	2	—	1	—	1	1	—	—	—	—
Edmonton	3	3	1	1	—	—	1	—	—	—	—	—	—	—	—	1	2	1	1	—	—	—
Lethbridge	1	1	—	—	1	—	—	1	—	—	—	—	—	—	—	1	1	—	—	—	—	—
Towns and Villages	8	12	5	4	1	2	7	1	—	—	—	—	2	2	1	6	9	2	1	—	—	—
Rural Districts	5	14	3	—	3	—	6	—	—	—	—	—	—	3	2	3	12	1	—	—	—	—
Totals	28	41	9	7	5	3	14	5	1	—	1	—	5	19	4	13	42	6	2	—	—	2

SCARLET FEVER

Cities :	35	51	6	9	12	9	10	7	5	2	7	2	12	5	—	15	55	16	—	—	—	—	86
Calgary	1	39	5	6	7	3	6	13	16	8	2	4	3	4	—	1	42	10	6	1	—	1	
Drumheller	5	8	2	1	1	4	1	—	—	4	1	1	1	—	1	6	5	—	—	—	—	77	
Edmonton	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	13	
Lethbridge	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
Medicine Hat	—	2	—	—	—	2	2	—	—	—	—	—	—	—	—	—	1	—	—	1	—	2	
Red Deer	60	57	15	23	9	9	25	10	1	—	7	12	5	1	1	16	72	19	9	—	—	117	
Towns and Villages	69	70	23	33	27	6	5	15	2	3	3	1	—	21	—	20	79	30	4	—	6	139	
Rural Districts																							
Totals	209	229	51	72	56	33	48	45	24	17	20	20	21	31	2	76	257	75	20	1	7	438	

ERYSIPELAS

Cities:	2	1	—	—	—	—	—	—	—	—	—	1	1	1	—	1	—	1	—	—	—	3
Calgary	11	17	5	1	1	4	2	1	4	1	2	2	3	3	—	1	2	4	4	1	—	1
Drumheller	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	28
Edmonton	5	2	1	1	3	1	—	3	—	—	—	—	—	1	1	—	1	1	1	—	—	3
Lethbridge	7	5	2	—	1	1	—	—	—	—	2	2	—	1	2	1	—	3	1	3	2	7
Towns and Villages																						12
Rural Districts																						
Totals.....	27	27	8	2	5	6	2	7	4	1	5	5	3	6	4	3	3	6	9	19	8	54

Public Health Education Division

(F. T. COOK, *Lecturer*)

Health educational work in Alberta is of two general forms—indirect or incidental and direct or specific.

More than ever in the established lines of public health work, such as communicable disease control, sanitation, public health nursing, venereal disease clinics, child welfare clinics, travelling clinics, and diagnostic clinics stress is laid on preventive measures, and a great deal of valuable educational work is being done. For example, during the year 15,000 children were inspected in the regular child welfare clinics and 12,000 home visits were made by the nurses in charge of these clinics, nearly 4,000 infants and pre-school children were examined at travelling child welfare clinics, 2,000 people pass through the venereal disease clinics annually, and in the course of the year the health inspectors make personal contact with a great number of people, while in the Sanatorium special attention is paid to educating the patients in methods of protecting other people.

Besides these incidental, though effective forms, a great deal of direct educational work was done. During the first three months of the year Dr. Margaret Owens conducted a series of meetings in the interest of sex education for women and senior girls. Fifty-four lectures on "The Period of Adolescence" were given to 4,036 women. This work was undertaken with the co-operation of a number of the women's organizations of the Province.

Lectures on home nursing, child and maternal hygiene, first aid, immunization, and talks to juniors were given at 124 places, to 3,117 people, mostly women, by Miss A. Conroy, the public health nurse engaged in this work.

Radio talks by members of the staff were broadcast from station CKUA every two weeks during the Homemakers' Hour, with the exception of a short period in the summer. In these talks such subjects as child welfare, mental hygiene, cancer and sanitation were outlined.

During the year monthly bulletins were published by the Communicable Disease Branch. In addition to these a special summer bulletin was issued. These bulletins were sent to all local boards of health and to individuals and organizations on request.

Two exhibits were held during the year, one at the Edmonton exhibition and one at the annual U.F.A. convention.

The usual lecture service was continued by the lecturer during the year. One hundred and fifty-seven meetings were held in 130 different places, with a total attendance of 21,150 people. Moving pictures, featuring various health topics, were shown at practically all meetings. Included in the above total are ten lectures with

pictures on venereal diseases. Twenty meetings were held within the two full-time health districts, in co-operation with the medical officers of health.

An increasing number of requests for this service come from school boards, boards of trade, hospitals, rural and urban organizations, churches and community organizations.

There is a notable increase in the number of requests for health educational material in recent years. These include requests for material on sex hygiene, mental hygiene, various diseases, economics of health, statistics and general teaching material for use in the schools. The Department endeavors to meet such requests wherever possible.

Hospital Inspection Branch and Medical Inspector's Report of Operations

(E. A. BRAITHWAITE, M.D., *Inspector of Hospitals*)

During the year I visited and inspected 80 of the approved hospitals in the Province. The total number of inspections was 94.

The total number of operations, taken from the weekly hospital operation reports, was 22,388, and the number of deaths following operations was 307.

The following is a list of operations performed and deaths which occurred in the approved, municipal and private hospitals during the year 1931:

	Approved H.	Deaths	Municipal H.	Deaths	Private H.	Deaths
GENERAL:						
Abscess	461	5	153	0	5	0
Adenectomy	10	0	0	0	0	0
Adhesions	188	1	15	0	0	0
Albee's Operation	0	0	0	0	0	0
Amputation	278	1	147	0	1	0
Anus	0	0	0	0	0	0
Ankylosis	3	0	0	0	0	0
Appendectomy	3736	42	638	9	28	1
Arthroclasis	0	0	0	0	0	0
Arthrodesis	26	0	2	0	0	0
Arthroplasty	1	1	0	0	0	0
Aspiration	33	4	8	1	0	0
Bladder	0	0	0	0	0	0
Bone Graft	4	0	0	0	0	0
Bone Plating	10	0	5	0	0	0
Bowel	27	6	4	4	0	0
Bronchoscopy	3	0	0	0	0	0
Bunionectomy	7	0	2	0	0	0
Burns	2	0	0	0	0	0
Bursitis	2	0	0	0	0	0
Cancer	142	30	20	10	1	0
Carbuncle	20	0	5	0	0	0
Cauterization	24	0	1	0	0	0
Cecopexy	9	0	0	0	0	0
Cholecystectomy	319	14	51	3	0	0
Circumcision	253	0	69	0	0	0
Colopexy	3	0	1	0	0	0
Colostomy	26	4	1	1	0	0
Craniotomy	0	0	0	0	0	0
Curetting	71	0	21	0	0	0
Cystectomy	19	0	6	0	0	0
Cystoscopy	312	0	19	0	0	0
Cystotomy	50	1	4	0	0	0
Decompresia	4	1	0	0	0	0
Dilatation	4	1	0	0	0	0
Dislocation	48	1	10	0	0	0
Enterectomy	2	0	3	0	0	0
Epididymotomy	6	1	0	0	0	0
Evulsion Nail	1	0	0	0	0	0
Excision	193	0	23	0	0	0
Examination	32	0	2	0	0	0
Extraction Teeth	401	1	143	0	2	0
Fasciotomy	3	0	0	0	0	0
Fistula	54	0	17	2	0	0
Foreign Body	37	0	0	0	0	0
Fracture	735	3	157	0	7	0
Fulguration	9	1	0	0	0	0
Gastrectomy	4	1	0	0	0	0
Gastroenterostomy	67	8	10	3	0	0
Gastrostomy	2	0	0	0	0	0
Hammer Toe	8	0	3	0	0	0

	Approved H.	Deaths	Municipal H.	Deaths	Private H.	Deaths
Hare Lip	21	0	3	0	0	0
Hemorrhoidectomy	173	0	28	0	2	0
Herniotomy	482	8	108	3	3	0
Hydrocele	37	0	17	0	1	0
Ileocolostomy	6	0	3	0	0	0
Incision	220	3	100	3	1	0
Injection	31	0	5	0	0	0
Intussusception	2	0	0	0	0	0
Jejunotomy	12	0	0	0	0	0
Laminectomy	2	1	1	0	0	0
Laparotomy	165	10	62	9	4	0
Ligation	20	1	5	0	0	0
Lithotomy	3	0	0	0	0	0
Lobectomy	6	0	0	0	0	0
Manipulation	57	1	1	0	0	0
Nephrectomy	38	5	1	0	0	0
Nephrotomy	5	0	1	0	0	0
Neurectomy	1	0	0	0	0	0
Orchidectomy	21	0	0	0	0	0
Osteomyelitis	84	6	5	0	0	0
Osteoplasty	4	0	0	0	0	0
Osteotomy	13	1	0	0	0	0
Peritonitis	19	9	5	5	0	0
Phlebectomy	3	0	0	0	0	0
Plaster Cast	146	0	21	0	0	0
Plastic	15	0	0	0	0	0
Pneumothorax	34	0	1	0	0	0
Polypi	16	0	1	0	0	0
Proctoscopy	22	0	0	0	0	0
Prostatectomy	92	11	8	0	0	0
Puncture	17	2	4	0	0	0
Pyloroplasty	5	0	0	0	0	0
Removal	207	6	42	2	0	0
Repair	115	6	52	0	0	0
Resection	75	7	15	3	4	0
Sequestrectomy	28	1	1	0	0	0
Sinus	1	0	0	0	0	0
Skin Graft	38	0	3	0	0	0
Splenectomy	6	0	0	0	0	0
Suturing	250	2	53	0	0	0
Sympathectomy	0	0	0	0	0	0
Synovectomy	1	0	0	0	0	0
Tenoplasty	4	0	0	0	0	0
Tenotomy	10	0	0	0	0	0
Thoractomy	6	0	0	0	0	0
Thyroidectomy	275	1	13	0	0	0
Transfusion	143	1	10	0	0	0
Tumor	177	1	40	1	0	0
Tuberculosis	41	2	8	0	0	0
Urethrotomy	6	1	0	0	0	0
Varicocele	22	0	2	0	0	0
Vasectomy	6	0	0	0	0	0
Wounds	168	7	68	0	0	0

OBSTETRICAL AND GYNAECOLOGICAL:

Abortion	388	2	117	0	0	0
Adhesions	20	0	1	0	0	0
Cervix	62	0	24	0	0	0
Caesarean Section	46	6	10	1	0	0
Cauterization	47	0	3	0	0	0
Colporrhaphy	21	0	1	0	0	0
Colpotomy	0	0	1	0	0	0
Curettage	399	1	64	0	0	0
Cysts	13	0	0	0	0	0
Dilatation	188	0	18	0	0	0
Examination	29	0	28	0	0	0
Hysterectomy	181	8	14	0	0	0
Induction Labor	18	1	3	0	0	0
Insertion Radium	90	0	0	0	0	0
Oophorectomy	132	0	20	0	0	0
Ovariectomy	57	0	16	0	0	0
Ovariectomy	0	0	0	0	0	0
Perineorrhaphy	92	0	11	0	0	0
Retroversion	4	0	0	0	0	0
Salpingectomy	208	1	17	0	0	0
Salpingo-oophorectomy	73	0	1	0	0	0
Sterilization	9	0	11	0	0	0
Supra-pubic	2	0	0	0	0	0
Suspension	0	0	0	0	0	0
Trachelorrhaphy	11	0	2	0	0	0
Uterus	103	0	22	0	0	0

	Approved H.	Deaths	Municipal H.	Deaths	Private H.	Deaths
EYE, EAR, NOSE, THROAT:						
Abscess	19	0	18	0	0	0
Adenoidectomy	74	0	11	1	2	0
Antrum	51	0	7	0	0	0
Cataract	84	0	2	0	0	0
Cautery	14	0	1	0	0	0
Cysts	9	0	4	0	0	0
Dacryocystectomy	5	0	0	0	0	0
Dilatation	23	0	1	0	0	0
Enucleation Eye	65	0	1	0	0	0
Esophagoscopy	3	0	0	0	0	0
Ethmoidectomy	3	0	0	0	0	0
Examination	1	0	0	0	0	0
Excision	8	0	0	0	0	0
Foreign Body	6	0	0	0	0	0
Glaucoma	2	0	1	0	0	0
Iridectomy	50	0	0	0	0	0
Laryngoscopy	1	0	0	0	0	0
Mastoidectomy	87	2	11	1	0	0
Myomectomy	0	0	0	0	0	0
Paracentesis	25	1	3	0	0	0
Polypi	33	0	2	0	0	0
Pterygium	4	0	1	0	0	0
Submucous Resection	80	0	0	0	0	0
Suturing	26	0	0	0	0	0
Synectomy	23	0	0	0	0	0
Tenotomy	8	0	0	0	0	0
Tonsillectomy	2462	1	428	0	4	0
Tracheotomy	23	0	6	0	0	0
Turbineotomy	40	0	7	0	0	0
Tonsils and Adenoids	2403	0	373	1	10	0
Total number of operations in hospital.....					22,388	
Total number of deaths from operations.....					307	
Percentage					1.37	

In addition to the operations classified above the following operations were performed by the Travelling Clinic:

Tonsils and Adenoids	676
Circumcision	6
Other minor operations	63

Private Hospitals Division

(MARY E. CONLIN, R.N., *Inspector*)

Seventy-four private hospitals were licensed during the year 1931, nineteen of which were licensed as baby shelters. One hundred and twelve inspections were made during the year, and in addition four institutions were visited where babies are placed.

There has been a decided improvement in the condition of the baby shelters due to quarterly inspections being made. We have been endeavouring to keep the number of baby shelters within a well-defined limit.

Where it has been possible in connection with the private hospital work, in the districts I have visited, I have made an inspection of cases receiving free insulin through the Department of Health. In the latter part of this year, twenty-one inspections were made in the city of Edmonton.

While inspecting hospitals in the district north of Peace River, a week was spent in the Hines Creek district organizing the new nursing district of Worsley.

Provincial Laboratory

(ALLAN C. RANKIN, C.M.G., M.D., D.P.H.)
(*Provincial Bacteriologist*)

There were 57,245 examinations carried out during the time under consideration—an increase of 6,898 over the previous year.

The provincial analyst has been responsible for the chemical examination of samples of water and milk submitted. The co-operation of departments within the University has been of much assistance.

The following table indicates the nature and number of the examinations:

SHORT REPORT OF THE WORK PERFORMED IN THE PROVINCIAL LABORATORY DURING THE YEAR 1931

Communicable Diseases:		
Sputum	705	
Diphtheria	1,849	
Typhoid Fever	894	
		3,448
Milks		1,505
Waters		1,934
Miscellaneous Examinations		3,026
Mothers' Milk		29
Medico-Legal Examinations		12
Bloods for the Wassermann Test		16,391
Smears for the Gonococcus		3,553
Icterus Index Determination		132
Van Den Bergh Determination		3,406
Pathological Histological Material		6,609
Blood Smear Examinations		81
Chicken Blood Examinations		16,427
Cattle Blood Examinations		539
Post-Mortem Examinations		112
Ascheim Zondek Test		41
Typhoid Vaccine (25 c.c. quantity)		404
Autogenous Vaccine		79
B.C.G. Vaccine (10 c.c. quantity)		185
Poliomyelitis Serum (15 c.c. quantity)		73
		57,245
Increase in number of specimens	6,898	
Increase in per cent.	13.6%	

COMMUNICABLE DISEASES

	Posi- tive	Nega- tive	Post Offices	Physi- tians	Month.	Sputum.	Diphth.	Typhoid Fever.	Total.
Sputum	110	595			Jan.	60	352	21	433
					Feb.	63	273	22	358
					Mar.	62	173	17	252
					April	70	253	13	336
					May	57	83	20	160
Diphtheria	77	1,772			June	73	81	12	166
					July	65	78	626	679
					Aug.	52	136	63	251
					Sept.	39	177	32	248
					Oct.	52	97	39	188
Typhoid Fever	73	821	123	274	Nov.	46	86	12	144
					Dec.	66	60	17	145
	260	3,188	123	274		705	1,849	894	3,448

The following table shows the number of water, milk, special, and blood containers prepared and distributed during the year:

Water Containers	1,329
Special Containers	1,392
Blood Containers	12,085
Chicken Blood Containers	16,427
	31,233

The following table shows the number of cubic centimeters of autogenous and other vaccines prepared and distributed during the year:

VACCINES AND SERUMS	
Typhoid Vaccine	1,010
Autogenous Vaccine	1,975
B.C.G. Vaccine	1,850
Poliomyelitis Serum	1,095
	<hr/> 5,930

The following table gives the details of the bacteriological, bacteriological and chemical, and chemical examination of water performed throughout the year:

Number of samples of water examined bacteriologically and found fit for human consumption	866
Number of samples of water examined bacteriologically and found unfit for human consumption	75
Number of samples of water examined bacteriologically and chemically and found unfit for human consumption	135
Number of samples of water examined bacteriologically and chemically and found fit for human consumption	778
Number of samples of water examined chemically and found fit for human consumption	49
Number of samples of water examined chemically and found unfit for human consumption	6
Number of samples of ice examined bacteriologically and found fit for human consumption	24
Number of samples of ice examined bacteriologically and found unfit for human consumption	1
	<hr/> 1,934

MILK EXAMINATIONS

Number of samples of milk examined bacteriologically	1,335
Number of samples of milk examined bacteriologically and chemically	165
Number of samples of milk examined chemically	5
	<hr/> 1,505
Number of samples of milk examined showing low butter fat content	24
Number of pasteurized milk samples examined bacteriologically with bacterial count above 30,000	30
Number of non-pasteurized milk samples examined bacteriologically with a bacterial count above 30,000	23
Number of pasteurized milk samples examined	363
Number of non-pasteurized milk samples examined	1,142

Pathological, Histological Material, etc.

During the year under consideration 6,609 specimens were examined, an increase of 441. This work is carried out under the direction of Dr. J. J. Ower in the Department of Pathology, and represents a very heavy and valuable routine in operative material. The diagnostic work is also very considerable and is of great value to the profession and public. This department, as a matter of fact, is responsible for much important work, and is carried on in a very capable manner with a small personnel.

Medico-Legal Examinations.

This work has included various examinations pertaining to criminal and other cases in the Province throughout the year, and was under the charge of the late Dr. Harold M. Vango, associate professor of medical jurisprudence in the University.

Waters.

There were 1,934 samples of water examined bacteriologically, bacteriologically and chemically, and chemically; and 1,329 water and milk containers were prepared and distributed during the year.

Milks.

One thousand five hundred and five samples of milk were examined bacteriologically, bacteriologically and chemically, and chemically, an increase of 140 samples.

Bloods for the Wassermann Test.

For the Wassermann test, 16,484 samples were received during the year. Of these specimens 93 were unsuitable for the test. Out of the 16,391 specimens examined, 2,577 proved positive. There were 4,598 bloods received from Calgary and south of Calgary, and 11,793 bloods received from north of Calgary, Edmonton and north of Edmonton. The increase in the number of specimens examined was 2,850, or 10%. Twenty-nine thousand nine hundred and four Wassermann and special blood containers were prepared and distributed.

Miscellaneous Examinations.

Three thousand and twenty-six miscellaneous examinations were made during the year.

Smears for the Gonococcus.

There were 3,553 examinations made during the period covered by this report, an increase of 649.

Chicken Blood Examinations.

There were 16,427 chicken blood examinations made for the diagnosis of bacillary white diarrhoea.

Cattle Blood Examinations.

Five hundred and thirty-nine cattle bloods were examined for the diagnosis of contagious abortion, an increase of 378.

Vaccines and Sera Prepared and Distributed.

Four thousand eight hundred and thirty-five cubic centimeters of vaccine were prepared. This includes typhoid vaccine, autogenous vaccine, etc. One thousand and ninety-five cubic centimeters of poliomyelitis convalescent serum was prepared.

Research Work.

Research work has continued and various publications were made.

Staff.

The death of Dr. Harold M. Vango removed a valuable member of the staff and a very acceptable confrere.

ESTIMATED COMMERCIAL VALUE IF MINIMUM CHARGES WERE MADE			
Sputum	705	\$ 1.00	\$ 705.00
Diphtheria	1,849	1.00	1,849.00
Typhoid Fever	894	1.00	894.00
Waters	1,934	15.00	29,010.00
Milks	1,505	5.00	7,525.00
Mothers' Milk	29	2.00	58.00
Miscellaneous Examinations	3,026	3.00	9,078.00
Medico-Legal Examinations	12	5.00	60.00
Bloods for the Wassermann Test	16,391	5.00	81,955.00
Smears for the Gonococcus Test	3,553	1.00	3,553.00
Pathological Histological Material	6,609	5.00	33,045.00
Icterus Index Determination	132	1.00	132.00
Van Den Bergh Determination	3,406	1.00	3,406.00
Blood Smear Examinations	81	2.00	162.00
Chicken Blood Examinations	16,427	.10	164.27
Cattle Blood Examinations	539	.20	107.80
Ascheim Zondek Test	41	5.00	205.00
Typhoid Vaccine (25 c.c. quantity)	404	1.00	404.00
Autogenous Vaccine (25 c.c. quantity)	79	10.00	790.00
B.C.G. Vaccine (10 c.c. quantity)	185	3.00	555.00
Poliomyelitis Serum (15 c.c. quantity)	73	2.50	182.50
	57,133		\$173,840.57

Post Mortems, Vaccines and Sera not included in total number of specimens.
Increase in estimated value of work, \$16,829.07.

NOTE.—Again it is considered advisable to reduce some of the nominal charges, and for purposes of comparison in the future an additional reduced (\$37,821.50) commercial estimate is attached.

REVISED STATEMENT OF COMMERCIAL VALUE IF MINIMUM CHARGES
WERE MADE

Sputum	705	\$ 1.00	\$ 705.00
Diphtheria	1,849	1.00	1,849.00
Typhoid Fever	894	1.00	894.00
Waters	1,934	10.00	19,340.00
Milks	1,505	3.00	4,515.00
Mothers' Milk	29	2.00	58.00
Miscellaneous Examinations	3,026	3.00	9,078.00
Medico-Legal Examinations	12	5.00	60.00
Bloods for the Wassermann Test	16,391	3.50	57,368.50
Smears for the Gonococcus Test	3,553	1.00	3,553.00
Icterus Index Determination	132	1.00	132.00
Van Den Bergh Determination	3,406	1.00	3,406.00
Pathological Histological Material	6,609	5.00	33,045.00
Blood Smear Examinations	81	2.00	162.00
Chicken Blood Examinations	16,427	.10	1,642.70
Cattle Blood Examinations	539	.20	107.80
Ascheim Zondek Test	41	5.00	205.00
Typhoid Vaccine (25 c.c. quantity)	404	1.00	404.00
Autogenous Vaccine (25 c.c. quantity)	79	10.00	790.00
B.C.G. Vaccine (10 c.c. quantity)	185	.....	.....
Poliomyelitis Serum (15 c.c. quantity)	73	2.50	182.50
	57,133		\$136,019.07

SERUMS AND VACCINES DISTRIBUTED DURING THE YEAR 1931

Smallpox, 10 points	25,300 points
Diphtheria Antitoxin:	
1,000 units	1,551,000 units
2,000 units	586,000 units
5,000 units	335,000 units
20,000 units	10,180,000 units
Diphtheria Toxoid:	
1 person	2,936 persons
6 persons	2,508 persons
12 persons	3,044 persons
Schick Test, 25 persons	2,225 persons
Scarlet Fever Antitoxin:	
2 c.c. syringe	3,350 c.c.
15 c.c. syringe	705 c.c.
15 c.c. vial	2,760 c.c.
Scarlet Fever Toxin:	
1 person	314 persons
6 persons	1,014 persons
Dick Test, 10 persons	940 persons
Anti-Pneumococcic Serum, 50 c.c. Type I	50 c.c.
Tetanus Serum:	
1,500 units	34,500 units
10,000 units	20,000 units
Anti-Meningitis Serum, 20 c.c. vial	2,020 c.c.
Pertussis P.D. & Co.:	
5 c.c.	70 c.c.
20 c.c.	100 c.c.
Typhoid Vaccine	10,100 c.c.
Other Vaccines	1,975 c.c.
B.C.G. Vaccine	1,850 c.c.
Poliomyelitis Serum	1,095 c.c.

Public Health Nursing Division

(KATE S. BRIGHTY, R.N., *Superintendent*)

Dr. Mary Percy, district physician, and Miss Olive B. Grant, public health nurse, resigned to be married.

Dr. Elizabeth Rodger, district physician serving the Kinuso district, returned to Scotland following an illness, and this service was subsequently discontinued.

A public health nurse serves in each of the following districts, viz.: Norma No. 515, with Vegreville as a centre; Marquis No. 157, with Milo as a centre; and Richdale No. 274, with Stanmore as a centre.

The routine work of school inspection, child welfare clinics and home visits have been conducted in these districts. Through health education, immunization has been encouraged, gaining a ready response from the people of the community. It has been made possible through the co-operation of the dental profession to provide dental services at a reduced rate to these municipalities, in many instances. Children with defective vision have also received attention from the Canadian National Institute for the Blind at the instigation of the public health nurses.

The public health nurse serving the Norma municipality has a fully equipped child welfare station and office in the new courthouse at Vegreville. In all of the three centres infant welfare work continues to be one of the major objectives.

The quiet and constructive work that is being accomplished by the public health nurse in municipal districts is evidenced by the confidence placed in her by the people of the community.

STATISTICAL REPORT

First inspection	1167	With defects	1591
Second inspection	1221	Without defects	779
Classroom inspection	61	Vaccinations	16
Treatments	9	Diphtheria toxoid treatments	57
Not vaccinated	1220		

DEFECTIVE CONDITIONS SUSPECTED

Vision	349	Tonsils	508
Hearing	41	Teeth	987
Adenoids	174	Posture	14

SYMPTOMS NOTED

Eye conditions	11	Ringworm	1
Enlarged thyroid glands	22	Skin conditions	47
Enlarged glands	69	Malnutrition	94
Tuberculosis	1	Mental	5
Nervous symptoms	12	Orthopaedic	5
Pediculosis	17	Communicable diseases	53

RESULTS OBTAINED

Glasses fitted	23	Home visits	485
Glasses refitted	16	Demonstrations	3
Tonsils removed	51	Interviews	81
Adenoids removed	33	Child Welfare Clinics	73
Dental treatments	285	Attendance, Child Welfare Clinics....	505
Surgical treatment	18	Public lectures	8
Medical treatment	27	Attendance at lectures	265
Schoolroom talks	78		

VISITING NURSE—ONE MUNICIPALITY

Calls made	387	Abortions	1
Office consultations	169	Pre-natal consultations	8
Dressings and treatments	225	Pre-natal visits	19
Medical cases	143	Child welfare visits	35
Surgical cases	65	Dental extractions	3
Obstetrical cases	3		

OUTLYING DISTRICTS

In the district of Worsley, on the Fort St. John Trail, north of Peace River, a new district nursing centre has been established. A comfortable cottage has been built for the nurse. She serves a large community of new settlers isolated from outside communication and medical services.

The nursing centre at Slave Lake was closed during the summer, temporarily, the entire district around Lesser Slave Lake being worked from the Kinuso centre.

Nine isolated districts in all are served—two by district physicians and seven by district nurses. These are as follows: Slave Lake, Kinuso, Worsley, Valley View, Pendryl, Peers, Jarvie, Notikewin and Wanham.

STATISTICAL REPORT

Home visits	3,213	Pre-natal interviews	357
Office visits	2,179	Child welfare interviews	74
Dressings	1,162	Child welfare visits	192
Medical cases	1,544	Deaths (under 1 year)	12
Surgical cases	752	Deaths (over 1 year)	14
Obstetrical cases	162	Indigent cases sent to city	53
Abortions	23	Visits to Indian Reserves	87
Pre-natal visits	251	Dental extractions	153

CHILD WELFARE CLINICS

Provincial Child Welfare Clinic, 604 Civic Block, Edmonton

The attendance at the Edmonton Child Welfare Clinic has exceeded that of the previous year by 742. The total number of clinics held in 1931 was 102.

In order to relieve overcrowding, a clinic for the weighing of children was started on Wednesday afternoons. Only cases on the roll who do not need to see the doctor are admitted.

STATISTICAL REPORT

Clinics held	102	Babies transferred to pre-school clinic	181
Babies in attendance	4,797	Pre-school children discharged	384
Pre-school children	1,184	Babies referred to family doctor	46
In attendance	5,981	Pre-school children referred to family doctor	31
Clinics for weighing babies	15	Out-of-town cases	117
Babies on the roll	1,965	Deaths of babies under 1 year	13
Pre-school children on the roll	874	Deaths of babies in second year	3
Babies admitted (new cases)	898	Deaths of pre-school children	2
Babies re-admitted	4	No. of home visits	5,884
Pre-school children admitted	217		
Pre-school children re-admitted	63		
Babies discharged	856		

DEFECTS FOUND

BABIES

Malnutrition	11	Seborrhoea	14
Rickets	34	Birthmarks	12
Intestinal Indigestion	86	Prurigo	1
Acidosis	1	Molluscum Epithelicle	1
Intertrigo	57	Icterus Neonatorum	4
Acute Colitis	2	Mucous Patches on Palate	1
Thrush	7	Umbilical Hernia	54
Stomatitis	6	Inguinal Hernia	8
Hypertonic	2	Moist Umbilicus	16
Impetigo	15	Granuloma of Umbilicus	16
Scabies	8	Mastitis	3
Eczema	62	Infected Umbilicus	1
Ringworm	1	Phimosis	98
Miliaria	14	Hypospadias	2
Dermatitis	1	Ammoniacal Diaper	14
Heat Rash	4	Rectal prolapse	1
Furunculosis	3	Hydrocele	6

DEPARTMENT OF PUBLIC HEALTH

DEFECTS FOUND—BABIES (Continued)

Blindness	1	Purpura Haemorrhagica	1
Urethral Ulcers	3	Haemorrhage from lip	1
Strabismus	4	Convulsions	1
Conjunctivitis	19	Spastic knees	1
Stye	4	Burns	5
Otitis Media	16	Fractured Clavicle	2
Geographical Tongue	5	Injury to Foot	1
Tongue-tied	13	Flat Feet	2
Enlarged Tonsils	4	Contusions	1
Enlarged Adenoids	1	Congenital Malformation of Head...	1
Enlarged Glands	5	Cyst	1
Infected Glands	1	Congenital Heart	1
Nasal Obstruction	2	Chest Condition	1
Acute Coryza	2	Cretin	1
Bronchitis	28	Snuffles	1
Capillary Bronchitis	5	Thymic Asthma	1
Broncho-Pneumonia	1	Anorexia	4
Alimentary Anaemia	1	Spina Bifida	1
Secondary Anaemia	2	Hydrocephalic Idiot	1
Hematoma	3	Mongolian Idiocy	3
Hemotoma of Sterno-mastoid	1	Thyroid Deficiency	1

PRE-SCHOOL

Malnutrition	5	Congenital Heart Condition	4
Rickets	2	Enlarged Inguinal Gland	1
Intestinal Indigestion	4	Systolic Murmur	1
Gastro-enteritis	1	Acrocydnia	2
Stomatitis	3	Alopecia Areata	1
Ringworm	1	Diabetes Mellitus	1
Miliaria	2	Celiac Disease	2
Eczema	6	Juvenile Goitre	1
Capillary Eczema	1	Wen	1
Scabies	7	Prolapse of Rectum	1
Impetigo	8	Bruises	1
Furunculosis	1	Flat Feet	3
Intertrigo	2	Club Feet	1
Jaundice	1	Spastic Paralysis	1
Acute Catarrhal Jaundice	1	Paralysis of left hand and right leg	1
Multiple Infection	1	Right Facial Paralysis	1
Hives	1	Tumor of Suprarenal Cortex at	
Otitis Media	4	Pineal	1
Haemorrhagic Conjunctivitis	1	Anorexia	12
Conjunctivitis	2	Worms	10
Granular Eyelids	1	Pica	1
Stye	1	Septic Throat	1
Enlarged Tonsils	91	Tonsilitis	3
Enlarged Adenoids	85	Asthma	1
Enlarged Glands	20	Broncho-Pneumonia	1
Carious Teeth	21	Chronic Cough	1
Abscessed Teeth	1	Insect Bites	1
Tongue-tied	1	Burns	1
Geographical Tongue	1	Injury to Left Leg	1
Umbilical Hernia	3	Contusions	1
Inguinal Hernia	1	Warts	1
Enuresis	8	Cretin	1
Incontinency	1	Thyroid Deficiency	1
Night Terrors	4	Congenital Idiocy	1
Inguinal T.B. Adenitis	1	Mongolian Idiot	1

Provincial Child Welfare Clinic, New Police Building, Calgary

Total number of clinics held in 1931	104
Highest attendance	108
Total attendance for 1931	6,626

Twice a month the clinic rooms are used for the Mental Hygiene Clinic, the Child Welfare Nurse being in attendance during these clinics.

Babies on roll	1,045	Babies discharged	226
Pre-school children	890	Pre-school children discharged	542
Number of visits	2,396	Deaths	12
Infants examined by doctor	2,975	Infectious diseases found at Clinic:	
Pre-school children examined by		Whooping Cough	3
doctor	586	Chickenpox	1
Babies admitted	605	Feeding cases:	
Pre-school children admitted	230	Breast	1,213
Babies re-admitted	5	Bottle	1,738
Pre-school children re-admitted	69	Mixed	530
Babies transferred to pre-school	392	Other	1,388

DEFECTS FOUND

	Pre- Infant. school.			Pre- Infant. school.	
Malnutrition	58	27	Impetigo	7	7
Congenital Malformation	2	3	Ringworm	—	8
Eyes	24	29	Scabies	—	3
Ears	18	25	Hernia	14	3
Tonsils	13	110	Diarrhoea	62	—
Adenoids	17	63	Phimosis	10	6
Glands	8	6	Anaemia	2	—
Nose	4	7	Furunculosis	3	—
Throat	5	4	Congenital Syphilis	2	—
Teeth	—	335	Mental Deficiency	3	4
Thrush	4	—	Other conditions	37	48
Rickets	3	—	Referred to Family Physician	18	31
Eczema	42	12			

DENTAL CLINIC

No. of cases treated	272
Appointments not kept	46

EYE, EAR, NOSE AND THROAT CLINIC

Operations: Tonsils and Adenoids	74
Adenoids	1
Remove Foreign Body from Ear	2
Treatments: Eye	680
Ear	196
Nose and Throat	124
Refractions and Prescriptions for Glasses	4

Provincial Child Welfare Clinic, Court House, Medicine Hat

The attendance at this clinic has shown an increase of 330 over the year 1930, the total attendance being 1,822. The nurse in charge at Medicine Hat also conducts child welfare clinics twice a month in Redcliff.

The chest clinics held periodically in Medicine Hat are organized by the provincial nurse with local assistance. During the year 173 patients were examined, the examinations being conducted by Dr. A. H. Baker and Dr. G. R. Davidson of the Central Alberta Sanatorium.

In November nursing duties in connection with the Provincial Social Hygiene Clinic in Medicine Hat were also assumed by the public health nurse.

STATISTICAL REPORT

Number of clinics held	102	Out-of-town cases	99
Number of visits	1,200	Babies referred to physician	29
Babies in attendance	1,491	Pre-school children referred to Family Physician	26
Pre-school children	331	Babies discharged	19
Number in attendance	1,822	Pre-school children discharged	80
Babies admitted	159	Deaths (babies)	3
Pre-school children admitted	29	Deaths (pre-school)	2
Pre-school children re-admitted	3	Babies on roll	375
Babies transferred to pre-school clinic	103	Pre-school children on roll	369

DEFECTS FOUND

	Pre- Babies. school.			Pre- Babies. school.	
Hernia	33	—	Diarrhoea	23	1
Congenital Malformation....	2	6	Scabies	3	—
Eyes	15	1	Furunculosis	1	—
Ears	1	2	Eczema	54	4
Glands	4	49	Thrush	1	—
Tonsils	—	49	Teeth	2	—
Adenoids	—	2	Congenital Syphilis	1	—
Carious Teeth	—	73	Impetigo	—	1
Malnutrition	35	12	Other conditions	47	11
Rickets	4	1			

TRAVELLING CHILD WELFARE CLINIC

This year the itinerary of the Travelling Child Welfare Clinic was the most extensive undertaken since this service was organized.

Total number of clinics	153	Total number of pre-school children	2,103
Total number in attendance	3,691	Total number without defects	1,585
Total number of babies	1,588		

PROVINCIAL TRAVELLING CLINIC

The Travelling Clinic commenced its summer itinerary June 3rd, and concluded September 16th. Twenty-one centres were visited, comprising 210 school districts.

As in other years, a survey of each district was made by a public health nurse, a preliminary health inspection given to each pupil, and school districts grouped to form a centre for the Travelling Clinic. In each district on the itinerary a public building was selected as a temporary hospital, and a local committee appointed to attend to details and assure community co-operation.

The staff of the Travelling Clinic was as follows: a surgeon in charge, one physician, two dentists, four nurses and a truck driver.

Warm appreciation of this service has been expressed by the people residing in the communities served.

At the conclusion of the itinerary of the Travelling Clinic a short itinerary for a dental clinic was arranged in some of the outlying districts, a dentist, anaesthetist and a nurse comprising the staff rendering this service.

STATISTICAL REPORT
SURVEY BY NURSES

First inspections	4,707	Vaccinations	1,567
Not vaccinated	401	Diphtheria Toxoid treatments	209
With defects	4,103		

DEFECTIVE CONDITIONS SUSPECTED

Vision	560	Tonsils	3,003
Hearing	27	Teeth	2,347
Adenoids	611		

SYMPTOMS OF

Malnutrition	1,103	Ringworm	2
Glands	1,313	Other skin conditions	115
Enlarged thyroid glands	454	Communicable disease	1
Other eye conditions	56	Condition of gums	36
Defective posture	658	Cleft Palate	1
Tuberculosis	2	Heart condition	1
Nervous symptoms	9	Mental defective	10
Pediculosis	93	Orthopaedic	45
Scabies	7		
Schoolroom talks	161	Glasses fitted	6

TRAVELLING CLINIC

Examined by physicians	3,179	Referred to family physician	26
Recommended for T. & A. Operations	1,525	Referred to Outdoor Clinic	12
Recommended for circumcision	16	Referred to Hospital	15
Recommended for strippings	71	Prescriptions:	
Recommended for minor operations	1	Goitre	376
T. & A. Operations	676	Miscellaneous	171
Circumcisions	6	Anaesthetics	547
Strippings	62	Anaesthetics for teeth only	1,059
Minor operations	1	Vaccinations	87

DENTAL CLINIC

Children examined	3,859	Fillings (number of teeth)	904
Recommended for treatment	2,195	Extractions	2,946
Recommended for fillings	647	Prophylaxis	14
Recommended for extractions	562	Anaesthetics	420
Children given treatment	1,196		

LECTURE COURSES ON HOME NURSING AND FIRST AID.

The itinerary for 1931 covered 89 points. Several cancellations were made due to rain and muddy roads which made it impossible for travelling.

Points visited	81	Home visits	62
Attendance	3117	Special night duty	4

The nurse found a greater interest taken in rural school conditions and in home and community health problems.

The effort the women have made to attend these lectures has been very encouraging, their gratitude and appreciation for the assistance rendered being most gratifying.

Addresses on various phases of health and health activities have been given to the public through the United Farm Women of Alberta, The Alberta Women's Institute, Farm Boys' and Girls' Week at the University of Alberta, Farm Women's Week at Olds and Vermilion, Calgary Child Welfare Week, and through the University of Alberta broadcasting station and other local groups.

First aid service was provided by this branch at the Edmonton Exhibition, with a public health nurse constantly in attendance.

Each of the centres served by a provincial nurse was visited and the records checked.

PRE-NATAL AND POST-NATAL LETTERS

The circularization of these letters is being continued and the letters are gaining in popularity among the women of Alberta. Compiled by the Canadian Council on Child and Family Welfare, they are distributed throughout the Province; 387 complete sets were sent out in 1931, and there are a total of 778 names on the current mailing list.

In co-operation with the Department of Education, an intensive school nursing service was carried on in the Turner Valley district for a period of four months, and this was productive of excellent results.

Many letters of appreciation have come from organizations and private individuals for the work of the Nursing Branch.

I wish to express my appreciation of the valuable assistance rendered the Child Welfare Clinics by Dr. Mildred Folinsbee Newell, Dr. F. J. Folinsbee, Dr. R. B. Leitch of Edmonton, Dr. Roach of Calgary, Dr. McLeod of Medicine Hat, and Dr. A. E. Ward of Redcliff.

Appreciation is also expressed for the close co-operation with our nursing service from the medical profession, the dental profession, women's organizations, teachers, the Red Cross Society, and welfare workers throughout the Province.

Hospitals Division

(W. B. MILNE, C.A., *Secretary of the Department*)

On December 31st, 1931, there were 91 approved hospitals in the Province.

The Killam General Hospital was opened as an approved hospital during the year.

The following two approved hospitals were closed: Arrowwood Community and Taber General.

The total grants for the year 1931 to hospitals and homes were \$436,941.

These hospitals, with the addition of the Central Alberta Sanatorium, had a total bed capacity of 4,495, divided as follows: General, 2,496; maternity, 625; infants, 527; paediatrics, 256; isolation, 290; tuberculosis, 301. It will be noted that a considerable increase in bed capacity is shown. This, however, is due to the inclusion of accommodation for infants which was not included in the statements of previous years.

On a population of 731,605 in 1931, we had one hospital bed for every 163 of the population, or 6.1 beds per thousand population; 67,010 patients were treated during the year, receiving 884,912 days' treatment. This means that hospital treatment was provided in 1931 to 9.1 per cent. of the population, or one in every 10.9 persons.

The average number of patients admitted daily was 183.6. The average number of days spent in hospital by each patient was 13.2, and if the Central Alberta Sanatorium, Junior Red Cross and S.C.R. patients were eliminated this would be reduced to an average of 11.1. The average number of patients in hospital daily was 2,424.4, or one in every 301.3 of our population. Each bed provided accommodation for an average of 14.9 patients during the year.

The nursing staff of these approved hospitals, excluding the Central Alberta Sanatorium, consisted of 436 graduates, 733 pupil nurses and 213 other attendants.

There were twelve nurses' training schools in the Province, and the number of nurses who were graduated during the year was 189. Twenty-three dietitians were employed.

During the year 8,482 maternity cases were cared for in these approved hospitals, maternity cases comprising 12.6 per cent. of the cases admitted. Living births were: Male 4,375, female 3,988, a total of 8,363. Multiple births totalled 82, and there were 262 stillborn. The maternal deaths reported were 28, this being a maternal death rate of .33 per cent. of total maternity cases admitted, and 3.5 per thousand living births.

The living births in Alberta in 1931 were 17,265. Therefore, 48.4 per cent. of the total living births took place in the Government approved hospitals.

In the hospitals reporting, 20,713 general anaesthetics were administered, and two deaths occurred from these.

Two hundred and thirty-eight autopsies were performed, and the infections developed in hospitals totalled 297, divided into: medical 86, surgical 177, obstetrical 34.

The number of communicable disease cases treated in hospital, excluding typhoid fever and tuberculosis was 1,019; typhoid cases numbered 88, and tuberculosis cases 731 (pulmonary 415, and other forms 316).

Among other cases treated in hospital there were 1,008 cardiac, 898 rheumatic, 446 goitre, 561 venereal and 798 malignant.

There were 262 deaths within ten days of surgical operations, and 385 deaths within forty-eight hours after admission. Communicable diseases accounted for 63 deaths.

The approved hospitals reported 114,308 laboratory examinations, and 23,263 X-ray examinations.

The total operating expenditure of approved hospitals for 1931 was \$2,712,572.77. This included administration of \$239,381.79, operating \$2,148,577.01, and maintenance \$324,613.97. The expenditure classed as capital is mostly repayments of principal on capital borrowing (\$157,776.41) and interest (\$250,507.94).

Earnings of these hospitals amounted to \$3,422,887.11. On referring to the details of the earnings, it will be noted that the Alberta Government grant does not agree with the total paid by the Province. This is accounted for by the fact that homes have not been included, and some of the hospitals have presented statements for their financial year which covers a different period from the calendar year.

Of the earnings shown \$427,800.50 was Alberta Government grant. Municipal and other grants, which include amounts paid by municipalities to take care of deficits, amounted to \$446,528.97. Patients' fees earned amounted to \$2,033,502.53; donations amounted to \$144,811.25, taxes for municipal hospital purposes amounted to \$289,893.50, and \$80,350.26 was classed as sundry earnings. To the taxes for municipal hospital purposes shown in the statement should be added \$17,000.00 requisitioned by the Lloydminster Hospital Board, but as this amount is not payable directly to the Lloydminster Hospital it was not included as an earning.

The average cost per patient per day was \$3.35; the average earnings per patient day was \$4.22. The average operating cost was divided as follows: administration 8.8%, operating 79.2%, maintenance 12%.

The statistical information given above has been obtained from financial and statistical statements which were requested from all approved hospitals for the year 1931, and although this is the third year that this information has been required, there are still some hospitals which appear to have some difficulty in completing the forms.

The following statements giving the details in connection with Alberta hospitals are submitted:

No. 1: Bed capacity, number of patients, number of days, nursing staff, etc.

No. 2: Nursing statistics, cases treated, anaesthetics, autopsies, etc.

No. 3: Expenses of administration, operating, maintenance and capital repayments.

No. 4: Hospital earnings.

No. 5: Costs per patient per day, earnings per patient per day, and percentage of administration, operating and maintenance.

MUNICIPAL HOSPITALS

Twenty-two municipal hospitals were in operation on December 31, 1931.

This does not include the sub-hospital at Craigmyle, as it is considered part of the hospital facilities of the Hanna district. The sub-hospital at Blackie in connection with the High River district was closed.

Additional territory was taken in during the year by the following districts: Bassano, Grande Prairie, Innisfail, Mannville, Peace River, Stettler, Vulcan and Wainwright.

Statistics of the municipal hospitals will be found with the other approved hospitals of the Province.

No. 1—STATISTICS OF ALBERTA HOSPITALS, 1931

Name of Hospital	Bed Capacity										Patients Admitted for Treatment					Nursing Staff			Nurses graduated during year	Affiliation with other hospitals for nurses	Dietitians																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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No. 1—STATISTICS OF ALBERTA HOSPITALS, 1931—Continued

Name of Hospital	Bed Capacity						Patients Admitted for Treatment						Nursing Staff		Nurses graduated during year	Affiliation with other hospitals for nurses	Dietitians							
	General	Maternity	Infants	Paediatrics	Isolation	Tuberculosis	Total		Semi-Private	Public		Male	Female	Number of days				Aver. days' stay in hospital	Aver. No. of patients in hospital daily					
							Private	Basinnettes																
Edmonton University (Civilian)	...	...	...	30	...	20	360	12	28	320	...	1,644	1,147	57,232	20.50	289.90	39	85	18	...	...	...	2	
Edmonton University (S.C.R.)	310	...	...	...	...	...	...	...	...	...	...	565	72	25,567	45.09	...	...	...	...	...	Yes	...	...	...
Edmonton, University (Orthopaedic)	...	...	...	...	...	...	...	...	...	...	...	94	15	18,284	110.14	...	...	...	...	...	...	...	...	...
Edmonton, University (Tuberculosis)	...	...	...	...	...	...	...	...	...	...	...	67	267	4,766	58.12	...	...	...	...	...	...	...	...	...
Edson, St. John's	28	5	5	...	1	...	39	4	8	22	5	259	489	5,053	9.59	13.84	5	9	...	...	...	...	...	...
Elk Point Municipal	7	6	5	...	1	2	21	2	2	12	5	365	155	8,116	10.09	22.23	4	2	...	...	...	...	...	...
Empress Cottage	17	...	...	...	...	...	17	...	17	...	...	124	155	2,506	8.98	6.86	3	1	...	...	...	...	...	...
Empress Cottage	6	3	2	...	...	...	11	...	9	...	...	125	149	1,917	6.99	5.22	2	2	...	...	...	...	...	...
Fairview W.I.	...	...	...	...	...	...	16	6	10	...	...	50	53	2,589	25.13	7.09	1	2	...	...	...	...	...	...
Fort Vermilion, St. Theresa	15	1	...	...	...	...	24	5	9	6	4	88	163	2,432	9.69	6.66	4	3	...	...	...	...	...	...
Galahad, St. Joseph's	13	4	4	2	1	...	24	5	9	6	4	4	5	96	10.66	.26	1	1	...	...	...	...	...	...
Gleichen General	4	3	1	1	1	...	9	2	2	...	...	516	549	11,572	10.80	31.70	10	...	...	...	...	...	...	...
Grande Prairie Municipal	24	5	12	4	1	4	50	4	...	34	12	93	114	4,212	20.34	11.54	1	...	...	...	...	...	...	...
Grouard, St. Joseph's	20	...	...	...	2	2	24	6	1	...	...	567	740	13,802	10.56	37.81	8	2	...	...	...	...	...	...
Hanna Municipal	32	10	10	8	2	2	64	26	20	8	10	98	114	4,212	20.34	11.54	1	...	...	...	...	...	...	...
Hanna, Craigmyle Sub-hospital	6	3	3	...	...	...	12	1	8	...	...	64	95	1,554	9.77	4.25	2	...	...	...	...	...	...	...
Hardisty, St. Anne's	19	1	4	...	...	...	24	4	4	12	4	214	220	3,827	8.81	10.48	3	2	...	...	...	...	...	...
High Prairie Community	3	2	2	...	...	...	7	2	3	...	...	39	44	852	10.26	2.33	1	...	...	...	...	...	...	...
High River Municipal	28	10	8	...	...	...	46	4	34	...	...	312	432	8,336	11.20	22.83	5	6	1	Yes	6	...	...	...
Innisfail Municipal	28	8	2	...	...	...	38	...	...	36	2	274	385	7,775	11.79	21.30	5	2	...	...	...	...	...	...
Islay Municipal	16	...	...	...	...	...	16	...	...	16	...	132	193	3,825	10.23	10.47	3	...	...	...	...	...	...	...
Jasper, Seton	12	3	5	1	1	...	22	3	6	...	...	87	215	2,157	11.84	5.90	3	5	...	...	...	...	...	...
Killam, General	6	3	2	1	...	...	12	3	2	5	2	37	53	916	10.17	2.50	2	...	...	...	...	...	...	...
Lacombe General	7	4	6	...	...	...	17	5	2	4	6	174	257	3,153	7.31	8.63	4	...	...	...	...	...	...	...
Lamont Public	39	10	10	6	...	5	70	12	36	12	10	714	910	18,856	11.61	51.66	3	30	...	Yes	7	...	...	...
Lethbridge, Galt	50	20	16	6	4	...	96	30	14	36	16	1,148	1,542	27,808	10.33	76.10	9	39	4	Yes	4	...	...	...
Lethbridge Isolation	...	...	...	...	14	...	14	...	...	14	...	9	13	418	19.00	1.14	1	...	...	...	...	...	...	...
Lethbridge, St. Michael's	57	29	21	12	2	...	121	29	24	47	21	508	563	7,552	7.03	20.69	14	...	...	...	...	...	...	...
Lloydminster Municipal	28	10	10	...	...	2	50	...	...	40	10	460	677	7,795	12.30	38.40	9	...	...	...	...	...	...	...
Macleod General	50	6	6	...	2	...	64	1	2	61	...	162	166	2,666	8.10	7.30	4	...	...	...	...	...	...	...
Mannville Municipal	6	4	6	...	...	...	16	3	7	...	6	176	258	3,102	7.10	8.49	3	...	...	...	...	...	...	...
Medicine Hat General	102	21	...	...	...	4	127	16	11	100	...	1,034	1,435	25,579	10.30	70.08	7	33	...	Yes	11	No	...	...
Medicine Hat Isolation	...	...	...	...	19	...	19	...	...	19	...	6	2	108	13.50	.29	1	...	...	...	...	...	...	...
Mundare, General	13	6	6	1	2	2	30	4	6	14	6	111	152	2,418	9.19	6.62	3	...	...	...	...	...	...	...
McLennan, Sacred Heart	17	5	...	...	...	...	22	4	...	18	...	196	226	3,688	8.73	10.10	4	...	...	...	...	...	...	...
Nanton, General	5	3	3	1	1	1	14	4	1	5	4	49	64	1,026	8.90	2.80	3	...	...	...	...	...	...	...
Nordegg General	8	4	...	...	...	...	12	4	...	8	...	53	39	823	8.94	1.25	1	...	...	...	...	...	...	...

No. 4—EARNINGS OF ALBERTA HOSPITALS 1931

Name of Hospital	Grants		Patients' Fees	Donations	Tax Requisitions	Sundry Earnings	Total Earnings
	Alberta Government	Municipal and others					
Athabasca, Municipal	\$ 2,335.00	.....	\$ 9,027.93	.....	\$ 8,827.88	\$ 32.54	\$ 21,223.35
Banff, Mineral Springs	2,036.00	\$ 1,223.10	13,985.38	\$ 559.25	.....	.....	17,803.73
Barrhead, St. Elizabeth	1,441.50	.....	7,928.25	.....	.....	.....	9,369.75
Bassano, Municipal	3,031.00	.....	10,750.50	.....	12,600.00	3,125.91	29,507.41
Bentley, Community	449.00	.....	2,082.00	481.00	.....	.....	3,012.00
Berwyn, W.I.	727.50	1,200.00	4,068.90	111.42	.....	.....	6,107.82
Bonnyville, K. H. Prettie	1,517.50	.....	1,646.78	5,520.00	.....	279.53	8,963.81
Bonnyville, St. Louis	1,361.50	.....	6,878.50	3,523.35	.....	.....	11,763.35
Calgary, General	31,097.00	* 85,315.20	134,255.31	.....	.....	1,913.24	252,580.75
Calgary, Isolation	1,656.00	* 10,232.97	393.00	.....	.....	.....	12,281.97
Calgary, Smallpox	9.00	561.67	.....	.....	.....	.....	570.67
Calgary, S.A. Grace	5,068.50	1,125.00	9,065.90	1,605.62	.....	1,584.00	18,449.02
Calgary, Holy Cross	19,466.00	4,000.00	153,643.67	278.73	.....	.....	177,388.40
Calgary, Junior Red Cross	9,821.00	.....	.....	4,810.40	.....	2,135.69	16,767.09
Camrose, St. Mary's	3,793.00	.....	24,238.54	.....	.....	.....	28,031.54
Cardston, Municipal	2,759.50	.....	7,415.90	.....	14,599.03	877.11	25,651.54
Castor, Rosary	2,341.00	.....	11,365.03	.....	.....	4,674.50	18,380.53
Cereal, General	733.50	.....	3,763.41	.....	.....	.....	4,516.91
Clareholm, General	1,626.00	650.00	9,488.38	.....	.....	.....	11,764.38
Cold Lake, John Neil	729.50	1,698.00	3,297.85	99.65	.....	263.67	6,088.67
Coleman, Miners' Union	1,294.50	.....	8,458.10	.....	.....	.....	9,752.60
Consort, Municipal	2,182.00	.....	6,505.80	196.50	6,604.65	491.18	15,980.13
Coronation, General	1,289.50	.....	9,739.10	500.00	.....	.....	11,528.60
Daysland, Providence	1,131.00	562.43	5,946.40	119.50	.....	5,791.35	13,550.68
Desmarais, St. Martin's	250.00	2,142.00	.....	.....	.....	.....	2,392.00
Didsbury, General	1,227.50	3,000.00	7,561.75	.....	.....	.....	11,789.25
Drumheller, Municipal	11,201.00	.....	40,326.77	.....	30,140.00	.....	83,585.82
Edmonton, Beulah Home	2,831.50	1,000.00	4,634.76	5,256.25	.....	1,918.05	13,911.15
Edmonton, General	22,279.00	10,500.00	126,807.75	36,667.00	.....	168.54	196,253.75
Edmonton, Misericordia	19,098.00	8,000.00	127,256.37	27,944.05	.....	5,147.50	187,445.92
Edmonton, S.A. Grace	2,283.00	.....	3,614.23	1,791.05	.....	.....	7,688.28
Edmonton, Royal Alexandra	49,466.50	* 182,459.03	280,385.39	.....	.....	4,739.99	517,050.91
Edmonton, Isolation	5,186.50	.....	22,123.00	.....	.....	.....	81,150.01
Edmonton, University	74,632.50	* 38,191.50	322,681.13	2,000.00	.....	.....	437,565.13
Edson, St. John's	2,526.50	2,826.75	12,321.52	146.00	.....	450.22	18,270.99
Elk Point, Municipal	3,950.00	.....	9,195.23	.....	11,308.08	345.95	24,799.26
Empress, Cottage	1,253.00	.....	9,242.45	129.10	.....	.....	10,624.55
Fairview, W.I.	958.50	1,302.00	5,090.95	.....	.....	.....	7,351.45
Fort Vermilion, St. Theresa	550.00	.....	3,832.00	.....	.....	.....	4,380.00
Galahad, St. Joseph's	1,216.00	.....	4,112.41	3,776.70	.....	87.00	9,192.11

No. 4—EARNINGS OF ALBERTA HOSPITALS, 1931—Continued

Name of Hospital	Grants		Patients' Fees	Donations	Tax Requisitions	Sundry Earnings	Total Earnings
	Alberta Govt.	Municipal and others					
Gleichen, General	\$ 48.00	.....	\$ 230.50	.....	.....	.....	\$ 278.50
Grande Prairie, Municipal	5,757.50	.....	27,385.40	337.75	\$ 26,595.69	390.88	60,467.22
Grouard, St. Joseph's	579.50	\$ 4,506.20	1,641.00	1,750.00	.....	.....	8,476.70
Hanna, Municipal	6,901.00	.....	20,863.70	.....	29,340.11	2,583.07	62,353.88
Hanna, Craigmyle-Sub.	777.00	.....	1,839.00	.....	.....	352.00	12,610.50
Hardisty, St. Anne's	1,913.50	.....	10,345.00	365.85	.....	.....	2,699.10
High Prairie, Community	426.00	.....	1,907.25	.....	21,105.40	3,364.17	38,771.55
High River, Municipal	4,168.00	.....	10,133.98	.....	15,230.00	1,566.73	31,742.57
Innisfail, Municipal	3,887.50	.....	11,058.34	.....	11,558.00	30.00	17,055.00
Islay, Municipal	1,912.50	.....	3,524.50	.....	.....	.....	14,187.23
Jasper, Seton	1,078.50	2,500.00	10,008.73	600.00	.....	.....	4,917.00
Killam, General	495.00	.....	2,151.85	2,270.15	.....	104.60	11,758.90
Lacombe, General	1,576.50	.....	9,983.31	94.49	.....	2,137.50	71,168.58
Lamont, Public	9,610.50	.....	55,553.29	3,867.29	.....	3,931.46	94,274.46
Lethbridge, Galt	13,904.00	5,000.00	71,209.00	230.00	.....	.....	3,826.97
Lethbridge, Isolation	209.00	2,744.47	873.50	.....	.....	8,692.76	44,035.88
Lethbridge, St. Michael's	3,776.00	.....	31,567.12	237.18	*	10.00	37,731.68
Lloydminster, Municipal	3,397.50	2,804.00	30,783.00	.....	.....	.....	23,580.74
Macleod, General	1,333.00	.....	*22,247.74	.....	.....	66.00	15,041.30
Mannville, Municipal	1,551.00	.....	3,538.30	.....	9,886.00	333.11	39,040.45
Medicine Hat, General	12,789.50	9,000.00	65,845.34	1,072.50	.....	.....	14,922.75
Medicine Hat, Isolation	54.00	.....	90.40	6,424.97	.....	515.99	13,074.94
Mundare, General	1,209.00	.....	4,924.98	529.53	.....	2,082.00	6,029.50
McLennan, Sacred Heart	1,844.00	.....	10,467.22	.....	.....	5,511.85	8,329.35
Nanton, General	313.00	.....	5,516.50	.....	.....	.....	10,620.91
Nordegg, General	411.50	.....	2,406.00	178.51	.....	.....	9,746.75
Olds, General	1,126.50	2,250.00	7,065.90	.....	6,532.00	.....	26,319.77
Onoway, Municipal	792.50	.....	2,422.25	.....	11,213.98	528.83	15,547.55
Peace River, Municipal	2,771.00	.....	11,480.25	325.71	.....	315.00	25,541.54
Pincher Creek, St. Vincent's	1,885.00	300.00	8,362.55	5,500.00	15,167.19	.....	12,772.80
Provost, Municipal	2,840.00	.....	7,219.35	.....	.....	2,222.14	20,876.10
Radway, St. Joseph's	1,575.00	.....	5,163.55	6,034.25	1,385.81	.....	5,095.40
Red Deer, Municipal	2,318.50	.....	14,949.65	.....	.....	.....	28,441.51
Rimby, St. Paul's	1,023.00	.....	4,072.40	.....	.....	188.21	359.30
St. Paul, St. Theresa	3,075.50	.....	14,017.20	6,160.60	.....	369.30	31,887.92
Smoky Lake, Geo. McDougall	1,852.50	.....	5,212.72	.....	16,169.34	984.91	2,093.00
Stettler, Municipal	3,734.00	.....	10,999.67	.....	.....	.....	12,040.95
Taber, General	342.50	.....	1,750.50	.....	.....	.....	28,839.00
Trochu, St. Mary's	1,522.50	150.00	4,884.50	5,483.95	.....	.....	.....
Vegreville, General	4,509.50	.....	24,329.50	.....	.....	.....	.....

Vegreville, R. M. Boswell	1,747.50	612.00	3,197.47	3,355.41	.....	28.00	8,940.38
Vermilion, Municipal	3,787.50	.....	8,372.45	.....	11,700.00	466.69	24,326.64
Viking, Municipal	2,561.00	.....	7,009.97	.....	9,525.00	203.13	19,299.10
Vilna, Our Lady's	1,031.00	700.00	2,409.45	1,390.00	.....	714.30	6,244.75
Vulcan, Municipal	2,107.50	.....	7,486.31	.....	11,188.96	604.35	21,387.12
Wainwright, Municipal	2,833.50	.....	9,853.60	.....	9,216.38	462.02	22,366.50
Wayne, General	1,657.50	.....	2,932.50	.....	.....	6,994.00	11,584.00
Westlock, Immaculata	2,077.00	450.00	14,179.00	3,087.64	.....	.....	19,793.64
Wetaskiwin, General	2,602.00	5,682.14	16,826.50	.....	.....	580.59	25,691.23
	\$427,800.50	\$446,528.97	\$2,033,502.53	\$144,811.35	\$289,893.50	\$ 80,350.26	\$8,422,887.11

*MUNICIPAL GRANTS:

Calgary, General, is amount charged to Mill Rate.
Calgary, Isolation, is amount charged to Mill Rate.
Calgary, Smallpox, is amount charged to Mill Rate.

Edmonton, Royal Alexandra:

1. City funds to make up deficit.....	\$ 94,981.15
2. Contribution to sinking fund	25,178.82
3. Interest paid on debentures	62,299.06

\$182,459.03

Edmonton, Isolation:

1. City funds to make up deficit.....	\$ 40,201.70
2. Contribution to sinking fund	4,838.81
3. Interest paid on debentures	8,800.00

53,840.51

Edmonton, University:

City of Edmonton	\$ 13,191.50
University of Alberta	25,000.00

38,191.50

*ALBERTA GOVERNMENT GRANT:

Edmonton, University:

General Grant	\$ 54,692.50
Special Grant	20,000.00

74,692.50

*Patients' Fees:

Macleod General, includes revenue from incurable ward.

*Tax Requisitions:

Municipal (Alberta Board)	\$ 17,000.00
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No. 5—COSTS OF ALBERTA HOSPITALS, 1931

Name of Hospital	Per Patient per day		Percentage of cost			Earnings, including grants and contri- butions from Municipalities per patient per day
	Exclusive of Capital and Reserves	Capital	Adminis- tration	Operating	Maintenance	
Athabasca, Municipal	\$ 2.58	.....	9.8	82.9	7.3	\$ 3.18
Banff, Mineral Springs	3.88	.....	12.9	77.3	9.8	4.35
Barrhead, St. Elizabeth	2.60	\$11.75	.9	66.4	32.7	3.25
Bassano, Municipal	3.59	.....	8.1	84.6	7.3	4.86
Bentley, Community	3.22	.....	4.9	94.8	.3	3.35
Berwyn, W.I.	3.46	.....	5.7	85.4	8.9	4.19
Bonnyville, K. H. Prettie	2.88	.....	4.9	80.8	14.3	2.95
Bonnyville, St. Louis	2.34	1.36	1.7	85.8	12.5	4.01
Calgary, General	3.88	.19	10.0	76.0	14.0	4.06
Calgary, Isolation	8.13	1.30	22.2	68.2	9.6	3.70
Calgary, S.A. Grace	1.77	.....	6.3	82.0	11.6	1.82
Calgary, Holy Cross	5.29	.69	4.4	52.4	43.2	4.45
Calgary, Junior Red Cross	1.49	.16	4.3	94.1	1.6	1.50
Camrose, St. Mary's	3.05	1.31	11.7	83.7	4.6	3.69
Cardston, Municipal	3.66	.....	6.9	89.5	3.6	4.64
Castor, Rosary	3.50	.20	11.0	70.4	18.5	3.92
Cereal, General	2.48	.....	.....	93.8	6.2	2.99
Claresholm, General	3.22	.....	2.2	94.0	3.8	3.61
Cold Lake, John Neil	5.70	.....	16.4	55.6	28.0	4.10
Coleman, Miners' Union	3.88	.....	5.5	88.0	6.5	3.78
Consort, Municipal	2.70	.....	11.0	83.2	5.8	3.77
Coronation, General	4.26	.....	5.4	93.2	1.4	4.47
Daysland, Providence	6.23	.64	2.4	90.6	7.0	5.99
Desmarais, St. Martin's	2.55	.....	.2	98.1	1.7	2.29
Didsbury, General	4.50	.....	5.8	89.8	4.4	4.80
Drumheller, Municipal	2.85	.32	10.3	84.8	4.9	3.73
Edmonton, Beulah Home	2.40	.....	7.1	78.9	14.0	2.43
Edmonton, General	3.25	.25	4.5	85.2	10.3	4.33
Edmonton, Misericordia	3.64	.33	9.5	68.4	22.1	4.90
Edmonton, S.A. Grace	2.28	.....	7.6	78.4	14.0	1.70
Edmonton, Royal Alexandra	3.41	.88	11.2	77.5	11.3	5.23
Edmonton, Isolation	5.30	1.31	16.7	73.6	9.7	7.82
Edmonton, University	3.37	.38	8.0	88.6	3.4	4.13
Edson, St. John's	2.41	.92	5.8	76.3	17.9	3.61
Elk Point, Municipal	1.92	.30	9.1	84.9	6.0	3.05
Empress, Cottage	3.29	.....	13.0	79.9	7.1	4.23
Fairview, W.I.	2.74	.....	1.0	84.1	14.9	3.83
Fort Vermilion, St. Theresa	1.69	.....	1.6	91.9	6.5	1.69
Galahad, St. Joseph's	3.37	.....	6.8	72.9	20.3	3.77
Gleichen, General	12.92	.....	6.0	92.0	2.0	2.91
Grande Prairie, Municipal	3.04	.79	13.0	82.5	4.5	5.24
Grouard, St. Joseph's	1.99	.....	11.8	74.9	13.3	2.02
Hanna, Municipal	2.73	.75	10.9	80.6	8.5	4.06
Hanna, Craigmyle-Sub.	3.89	.....	8.6	90.0	1.4	3.20
Hardisty, St. Anne's	1.80	1.08	2.0	95.5	2.5	3.16
High Prairie, Community	2.46	.....	1.7	97.6	.7	4.65
High River, Municipal	2.93	.65	7.0	87.7	5.3	4.08
Innisfail, Municipal	2.66	.87	13.4	82.8	3.8	4.45
Islay, Municipal	3.49	.22	11.1	83.5	5.4	6.57
Jasper, Seton	6.63	.....	2.9	73.1	24.0	5.36
Killam, General	4.33	.....	2.4	80.0	17.6	3.72
Lacombe, General	3.17	.....	6.6	88.7	4.7	3.77
Lamont, Public	3.26	.....	12.8	75.7	11.5	3.39
Lethbridge, Galt	2.66	.....	9.3	85.4	5.3	9.15
Lethbridge, Isolation	7.49	2.15	3.8	83.1	13.1	5.83
Lethbridge, St. Michael's	3.84	5.33	15.0	74.7	10.3	2.69
Lloydminster, Municipal	2.36	.....	10.0	86.4	3.6	8.84
Macleod, General	7.31	.54	7.2	83.2	9.6	4.84
Mannville, Municipal	3.43	.54	9.7	89.1	1.2	3.48
Medicine Hat, General	2.33	.....	10.7	84.1	5.2	1.33
Medicine Hat, Isolation	31.92	.....	1.3	95.0	3.7	5.40
Mundare, General	3.64	.69	3.9	94.3	1.8	4.04
McLennan, Sacred Heart	2.35	.....	2.0	90.2	7.8	5.87
Nanton, General	4.89	.....	3.3	88.7	8.0	10.12
Nordeg, General	7.66	.....	.8	96.2	3.0	4.71
Olds, General	3.57	.28	8.8	88.5	2.7	6.14
Onoway, Municipal	6.48	.06	8.7	87.5	3.8	4.71
Peace River, Municipal	2.72	.50	14.3	77.3	8.4	5.61
Pincher Creek, St. Vincent's	2.66	.....	5.2	77.7	17.1	4.59
Provost, Municipal	3.08	.62	11.5	84.0	4.5	4.05
Radway, St. Joseph's	2.51	.47	7.8	82.9	9.3	4.29
Red Deer, Municipal	3.39	.68	9.4	85.0	5.6	2.49
Rimbey, St. Paul's	3.60	.....	5.3	87.7	7.0	3.23
St. Paul, St. Theresa	3.37	.42	4.2	73.7	22.1	

No. 5—COSTS OF ALBERTA HOSPITALS, 1931—Continued

Name of Hospital	Per Patient per day		Percentage of cost			Earnings, including grants and contri- butions from Municipalities per patient per day
	Exclusive of Capital and Reserves	Capital	Adminis- tration	Operating	Maintenance	
Smoky Lake, Geo. McDougall	\$ 2.86	\$ 2.11	3.7	90.0	6.3	\$ 2.00
Stettler, Municipal	2.78	.53	13.8	78.1	8.1	4.42
Taber, General	2.65	.....	.....	99.0	1.0	3.06
Trochu, St. Mary's	2.94	.63	8.8	78.0	13.2	3.95
Vegreville, General	2.03	.....	3.3	86.9	9.8	3.20
Vegreville, R. M. Boswell	2.74	.....	1.1	88.0	10.9	2.56
Vermilion, Municipal	2.27	.55	9.9	8.67	3.4	3.21
Viking, Municipal	2.82	.57	12.9	83.3	3.8	3.77
Vilna, Our Lady's	2.86	.47	10.8	70.9	18.3	3.00
Vulcan, Municipal	3.75	1.08	10.4	82.9	6.7	5.07
Wainwright, Municipal	2.36	.59	12.6	83.2	4.2	3.95
Wayne, General	2.51	.55	7.3	89.2	3.5	3.49
Westlock, Immaculata	3.34	.86	1.5	74.2	24.3	4.77
Wetaskiwin, General	3.24	.....	3.8	90.0	6.2	5.07
	\$ 3.35	.....	8.8	79.2	12.0	\$ 4.22

Charity and Relief

(W. B. MILNE, C.A., *Supervisor*)

During the year 1931 this Department gave the required relief in 1,125 cases.

Relief was accounted for in the following manner:

Temporary relief	396	Medical accounts paid	331
Permanent relief	117	Hospital accounts paid	387
Transportation	61	Clothing	12
Deportation	10		

Temporary maintenance:

Salvation Army Hostel	302	Bonnie Doon Home, Edmonton	46
Macleod Hospital	22	St. Joseph's Hospital, Edmonton	18
Calgary Salvation Army	6	Lacombe Home, Midnapore	11
Gleichen Eventide Home	56	Providence Hospital, Daysland	4

The Alberta Provincial Police reported on 1,787 investigations made for and on behalf of the Department.

There were 136 cases referred to municipal authorities for their attention.

There were approximately 1,000 interviews in the office during the year.

Division of Social Hygiene

(HAROLD ORR, O.B.E., M.B., D.P.H., *Director*)

We have continued during the year to direct particular attention to the early detection of neurosyphilis. This we regard as important preventive work.

The cerebrospinal fluid of all syphilitic patients is examined between the sixth and ninth months of treatment. Patients in whose cerebrospinal fluid there are changes indicative of incipient neurosyphilis may be given adequate treatment at once, and, we believe, the disastrous advent of clinical neurosyphilis obviated. It is our policy to give the malaria pyrexia treatment to all such cases, and during the year twenty cases have been treated, without any deaths. Indeed, I would point out that the risk in the malaria treatment of asymptomatic neurosyphilis is practically nil, but of course increases in direct proportion to the degree of nerve tissue degeneration.

Neurosyphilitics, whether of the symptomatic or asymptomatic type, are given a course of neoarsphenamine and bismuth immediately following the malaria, and at the end of two months try-parasamide is substituted for the neoarsphenamine, and continued indefinitely.

During the year 326 cerebrospinal fluids were examined, and of these 45 were positive, thus indicating that the nervous system is affected in about 13.8% of our syphilitics. In our Edmonton clinic alone we have 320 syphilitics under treatment, which means about 40 cases of neurosyphilis. If these can be prevented from becoming institutional cases an enormous saving will eventually accrue to the Province.

Dr. Baragar and his staff at the Provincial Mental Hospital, Ponoka, have given generous assistance in this work, and practically all of the malaria pyrexia treatments have been given in that institution.

The following figures briefly indicate the work done in the various clinics during the year:

EDMONTON CLINIC, 9912 103rd Avenue

Number of Patients	655
Sexes of Patients: Male	486
Female	169

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	214	272	.....	486
Female	106	63	.....	169
Totals	320	335	.....	655

Number and results of Wassermann tests: 3,042 tests, of which 743 were positive.

Number and results of cerebrospinal fluid tests: 239 tests, of which 33 were positive.

CALGARY CLINIC, City Hall Annex, New Police Building

Number of Patients	917
Sexes of Patients: Male	663
Female	254

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	234	427	2	663
Female	126	128	.....	254
Totals	360	555	2	917

Number and results of Wassermann tests: 1,521 tests, of which 326 were positive.

Number and results of cerebrospinal fluid tests: 87 tests, of which 12 were positive.

MEDICINE HAT CLINIC, General Hospital

Number of Patients	36
Sexes of Patients: Male	23
Female	13

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	9	11	3	23
Female	8	4	1	13
Totals	17	15	4	36

Number and results of Wassermann tests: 161 tests, of which 82 were positive.

Number and results of cerebrospinal fluid tests: 1 test, which was negative.

LETHBRIDGE CLINIC, Galt Hospital

Number of Patients	66
Sexes of Patients: Male	53
Female	13

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	25	28	.....	53
Female	10	3	.....	13
Totals	35	31	.....	66

Number and results of Wassermann tests: 57 tests, of which 20 were positive.

FORT SASKATCHEWAN GAOL, Fort Saskatchewan

Number of Patients	152
Sexes of Patients: Male	88
Female	64

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	64	24	.....	88
Female	36	28	.....	64
Totals	100	52	.....	152

Number and results of Wassermann tests: 1,405 tests, of which 201 were positive.

LETHBRIDGE GAOL, Lethbridge

Number of Patients: Male	89
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CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Total.
Male	46	43	.....	89

Number and results of Wassermann tests: 669 tests, of which 62 were positive.

CASES REPORTED BY DOCTORS IN THE PROVINCE

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	27	98	.....	125
Female	17	16	.....	33
Totals	44	114	.....	158

RECAPITULATION

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	619	903	5	1,527
Female	303	242	1	546
Totals	922	1,145	6	2,073

Sanitary Engineering Division

(R. B. OWENS, B.A., B.E., *Provincial Sanitary Engineer*)

The following is a detailed list of works for which Provincial Board of Health certificates have been issued, together with the estimated cost of each:

WATERWORKS

Blackie—Certificate No. 358/31, Air Lift Water system. Estimated Cost	\$ 5,000.00
Calgary—Certificate No. 367/31, Water and Sewer connections. Estimated Cost	25,000.00
Drumheller—Certificate No. 362/31, Waterworks System. Estimated Cost	4,155.00
Edmonton—Certificate No. 352/31, Waterworks Extensions. Estimated Cost	61,300.00
Edmonton—Certificate No. 364/31, Waterworks Extensions. Estimated Cost	119,518.00
Gleichen—Certificate No. 346/31, Irrigation System. Estimated Cost	15,000.00
Grande Prairie—Certificate No. 357/31, Extensions to Waterworks System. Estimated Cost	7,000.00
Rocky Mountain House—Certificate No. 360/31, Waterworks System (water not for domestic consumption). Estimated Cost	12,397.00

SEWERAGE

Calgary—Certificate No. 345/31, Sewer Extensions, Bylaw 2687. Estimated Cost	\$ 9,106.00
Calgary—Certificate No. 349/31, Sewer Extensions, Bylaw 2672. Estimated Cost	124,591.00
Calgary—Certificate No. 353/31, Sewers, Bylaw 2719. Estimated Cost	995.00
Calgary—Certificate No. 355/31, Sewage Disposal Plant (3rd Unit, 1931). Cost	75,000.00
Calgary—Certificate No. 361/31, Sewer Extensions, Bylaw 2766. Estimated Cost	17,061.00
Camrose—Certificate No. 347/31, Sewage Disposal Plant and Extensions. Estimated Cost	16,723.50
Edmonton—Certificate No. 343/31, Extension to storm water relief sewers. Estimated Cost	100,000.00
Edmonton—Certificate No. 348/31, Sewer extensions. Estimated Cost	20,750.00
Edmonton—Certificate No. 350/31, Lateral sewers catch basins and service construction, 1931. Estimated Cost....	46,000.00
Edmonton—Certificate No. 351/31, Lateral sewers catch basins and service construction, 1930. Estimated Cost....	55,256.56
Edmonton—Certificate No. 365/31, Minor sewer extensions. Estimated Cost	6,000.00
Edmonton—Certificate No. 366/31, winter relief sewer construction. Estimated Cost	44,300.00
Edmonton—Certificate No. 368/31, Sewer construction. Estimated Cost	49,000.00
Edmonton—Certificate No. 369/31, Sanitary relief sewer. Estimated Cost	70,000.00

Lethbridge—Certificate No. 363/31, Storm trunk sewer.	
Estimated Cost	\$100,000.00
Medicine Hat—Certificate No. 344/31, Sewerage extensions.	
Estimated Cost	51,533.00

HOSPITALS

Coleman—Certificate No. 354/31. Addition to sun porch.
Coleman Miners' Hospital.

Plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants as required under Sections 10, 11, 12, 13, 14 and 15 of The Public Health Act, were duly examined, and where approval was given, certificates were issued.

Plans and specifications other than those aforesaid, but required by the Provincial Board of Health, were also examined, and the necessary action taken thereon.

Plans, specifications and proposals in connection with the sanitary engineering works submitted to the Public Utilities Commissioner were also examined and advice given.

Plans and specifications in connection with sanitary engineering works connected with hospitals under The Hospitals Act and Municipal Hospitals Act, were examined and advice given thereon.

Sanitary engineering works in connection with the institutions under the administration of the Public Works Department were visited, and advice given where necessary.

During the year reports on the analysis of water and ice were examined, and, where necessary, action in the matter of prohibiting the use of the supply was taken, or an investigation made for the purpose of advising as to a remedy.

Under the sanitation section of the Sanitary Engineering Branch of the Department, the following work was carried out:

There is now only one full-time health inspector employed by the Department. One inspector devotes one-third of his time to our inspections and the other two-thirds to inspections in the full-time health districts of High River and Red Deer. In addition, one inspector devotes part of his time to dealing with the office routine with respect to the system of supervision of purchasing adopted by the Department at the end of the year 1927.

Two hundred and thirty-two health districts were visited and inspected. Of this number 61 were inspected a second time.

Thirty-three lumber, tie, sawmill and mining camps were visited and inspected. Of this number 18 were inspected a second time.

One hundred and thirty-eight "Notices to Abate Nuisances" were issued and served by the inspectors, and 64 were ordered issued by representatives of the local health authorities.

Fifteen prosecutions were carried out, and convictions were obtained in each case; fines varying from \$5.00 to \$20.00 being imposed in addition to costs.

Detailed specifications in connection with the Glenmore waterworks, City of Calgary, were submitted, and received the necessary attention.

Sixty-one samples of water were collected for examination and analysis.

Twenty-eight samples of sewage were collected for examination and analysis.

Twenty-one sewage disposal plants were inspected.

Three hundred and seventy-six pounds of meat were seized and destroyed as unfit for food for human consumption.

Sixty-two complaints and requests for services of inspectors were received, and satisfactory adjustments were made in each case. Twenty-two requests for inspectors to assist in locating suitable locations for nuisance grounds, etc., and for further inspection of the district were made.

The services of the inspectors have been used in investigations of outbreaks of infectious and contagious disease.

Typical plans dealing with waterworks, sewage disposal, heating, ventilation, etc., have been prepared, printed and distributed. These are available to those who request information on these subjects.

The health and occupational therapy exhibit was again held during the Edmonton Exhibition.

The Public Health Regulations are being revised.

Dental Hygiene Division

(A. E. HEACOCK, L.D.S., D.D.S.)

During the year the various institutions under the Department received dental service. The Central Alberta Sanatorium was visited monthly except for a time in the summer. During this period Dr. McCaffrey gave part time service. Patients at the Provincial Mental Institute, Oliver and the Provincial Training School, Red Deer, were examined and necessary treatments carried out.

The Provincial Travelling Clinic operated from June 3rd to September 16th. During this period Dr. Gilchrist was again a member of the staff.

After the completion of the Travelling Clinic itinerary, a dental clinic was organized, and served a number of districts in the north country. This concluded the district services for the year. The following is a summary of the work of the Dental Clinic:

No. of children examined	680
No. of Children recommended for treatment	448
No. of children given treatment	224
No. of fillings	214
No. of extractions	429
No. of general anaesthetics	150

A summary of the services rendered in the various institutions is included in the reports of these institutions, and a report of the dental service in connection with the Travelling Clinic is included in the report of the Travelling Clinic.

Mental Health Division

(C. A. BARAGAR, M.D., *Commissioner of Mental Institutions
and Director of Mental Health*)

Reports from the following institutions under my direction have been submitted by the respective superintendents or directors:

Psychopathic Ward, University Hospital.
Provincial Mental Hospital, Ponoka.
Provincial Training School, Red Deer.
Provincial Mental Institute, Oliver.

A report of the work of the mental hygiene clinics has also been submitted.

During the year important changes with respect to personnel have occurred. Unfortunately, through ill-health, the Province has lost the services of Dr. E. H. Cooke, who from 1916 carried the heavy responsibilities of the head of the Provincial Mental Hospital, Ponoka, and Dr. C. P. Fitzpatrick, who had filled not only the post of medical superintendent of the Provincial Mental Institute, Oliver, but also that of director of the mental hygiene clinics since their inception.

In July, Dr. W. J. McAlister, medical superintendent of the Provincial Training School, Red Deer, took charge of the Provincial Mental Institute as acting medical superintendent, and Dr. D. L. McCullough, assistant medical superintendent at the Provincial Mental Hospital, Ponoka, took charge of the Provincial Training School, Red Deer. In September, Dr. Geo. A. Davidson was appointed assistant medical superintendent at the Provincial Mental Hospital, Ponoka.

Miss Catherine Lynch, R.N., was appointed superintendent of nurses at Ponoka early in January. Miss E. M. Holmes, R.N., was appointed matron at the Provincial Training School in place of Miss G. T. Dahlbeck, who resigned.

During the year the problems of the dietary departments of the various institutions were thoroughly studied by Mr. E. W. Kolb, of Calgary, and as a result they had the benefit of his wide experience in catering.

On the 29th of January the psychopathic ward of the University Hospital was opened as a centre for the observation and treatment especially of early recoverable cases.

At the Provincial Mental Hospital, Ponoka, the most important events of the year have been the commencement of a reorganization of clinical services and social activities, of a post-graduate course in psychiatric nursing, as well as a definite progress in the development of grounds. Over-crowding on the women's service has become an urgent problem.

At the Provincial Mental Institute, Oliver, the early completion of a very fine kitchen-dining room unit will not only greatly

facilitate the catering problem, but will also release accommodation for 75 more male patients from Ponoka.

Red Deer is providing accommodation for another 18 patients, chiefly high-grade girls, but insufficient accommodation to provide for the large number of applicants is an urgent problem. Then again there is the high proportion of low-grade cases, cases for whom relatively little can be done in the matter of social re-establishment as a whole. Only in this way can a really effective mental health programme be carried through.

Eugenics Board for the Province of Alberta

(J. M. McEachran, M.A., P.H.D., *Chairman*)

Under the provisions of the statute known as The Sexual Sterilization Act, the work of the Eugenics Board of Alberta has been steadily increasing. The Sexual Sterilization Act was assented to March 21, 1928. The first operation authorized by the board was performed on May 10th, 1929. Up to the end of the year 1931, 134 cases, of which 32 were men and 102 were women, were passed by the board, and sterilization was authorized subject in certain cases to certain conditions. Of these, 113 cases had been operated upon—23 men and 90 women.

During the year 1932 up to the date of report, 51 cases, 17 men and 34 women, have been passed by the board. Of these 28 have been operated upon, 8 men and 20 women.

Of the female cases operated on, in only five cases has there been a subsequent history indicative of promiscuity, and in four of these promiscuity preceded operation. In only one case so far where the patient was regarded as sexually well behaved before operation has the question of immorality become a subsequent problem. In that case the undesirable influence of a promiscuous sister was regarded as the root of the trouble, and not the operation. On account of her conduct and her mental state she was returned to a provincial institution.

In only one case so far has venereal disease supervened after operation in a sterilized female. This individual was one of the five who were reported as problems on account of promiscuity, and was returned to hospital. Four of these five women, including the one referred to, had venereal disease before operation.

So far there have been no undesirable sequelae and no indication of any impairment of physical health attributable to the operation.

One patient, a female epileptic and mental defective, died nine months after the operation of acute pulmonary tuberculosis. This, so far as could be ascertained, had no relationship to the operation. In fact, six months after the operation she was reported by the social worker who saw her as in good physical health except for carious teeth. Otherwise there have been no deaths, and so far as can be ascertained patients are in good physical health.

While the follow-up system in Alberta is unavoidably imperfect, an effort is made to ensure a reasonable amount of supervision through parents, guardians, and the various social agencies.

The Act is working smoothly. No complaints have been received from any quarter, and it may be definitely stated that the work of the board is being regarded with increasing favor by those who have responsibilities in connection with the mental hospital and mental hygiene services, and also it is believed by many others who have social welfare responsibilities.

Psychopathic Ward, University of Alberta Hospital

(C. A. BARAGAR, M.D., *Director*)

The psychopathic ward was opened for the reception of patients January 29th, 1931, and provides accommodation for 16 patients in the south wing of the University Hospital.

While in certain respects the psychopathic ward is an integral part of the University Hospital, and by arrangement that hospital provides accommodation, nursing and other services, the admission, care and control of patients is provided for by The Mental Diseases Amendment Act, 1931, and is under the supervision of the Director, who is appointed by the Lieutenant-Governor in Council, and is responsible to the Minister of Health. It is therefore, in effect, a part of the mental hospitals service of the Province.

It is the primary function of the ward to provide for:

- (1) The care and treatment of early cases of mental disorder, especially those who, as result of such treatment, may be returned to the community recovered or sufficiently improved as to render admission to a provincial mental hospital unnecessary.
- (2) An intermediate stage for the observation and treatment of patients who may subsequently be transferred to one or other of the provincial institutions. Such a stage, it is thought, would serve to reassure relatives and friends as well as physicians of the undoubted necessity for more prolonged care and treatment than is provided by the psychopathic ward.
- (3) The observation and treatment of a group of border-line cases not ordinarily admissible to a mental hospital and yet for whom psychiatric treatment is desirable.
- (4) A centre for the examination in consultation of special out-patient cases referred by physicians, welfare organizations, courts, and other authorities.

The ward subserves as well a second function scarcely less important than the first, a work that has only just begun, but can be further extended. It provides psychiatric clinical instruction to a certain extent for the senior medical classes of the University of Alberta and for the nurses of the University Hospital. The senior class of nurses have thus the opportunity of a brief period of experience in the nursing of psychiatric cases.

As a result of this training of physicians and nurses, it is hoped to make possible not only the earlier diagnosis and treatment of mental illness, but also to carry out more effectively a progressive mental hygiene programme in the Province.

During the eleven months of 1931 that the ward has been in operation, 93 psychiatric patients were admitted. Of these 47 were men and 46 were women. It is noteworthy that of this group 78.5% were voluntary, that is, they of their own accord signed the request for admission and treatment, while only 12.9% were admitted by certificates, and only 2.15% by warrant. In addition, 6.45% were admitted on transfer from one of the provincial institutions.

Of those admitted, 47.3% were born in Canada, 25.8% in Great Britain or other British Dominions, 4.3% in the United States, and 22.5% in other countries. While the majority of patients came from the town, a fair number came from the country. The various occupations were fairly generally represented. Of the men, 57.45% were single and 36.17% married, while with respect to the women the reverse holds true, 26.09% being single and 58.70% married. This is in harmony with the usual finding in institutional psychiatric practice.

It will also be noted that the great majority of patients were referred by physicians, who are thus taking advantage of the facilities offered by the ward, but patients have also been referred by the Mental Hygiene Clinics, Department of Public Health, Department of Pensions and National Health, the Workmen's Compensation Board, the courts, and the Attorney-General's Department.

Of all the patients admitted, 69.69% were discharged, 28.92% were returned or transferred to one or other of the provincial institutions, and two patients died, while 10 remained in the ward at the end of the year.

Of the discharged, 19.28% were recovered or well on the way to recovery, 26.51% improved, and 22.9% unimproved. As without special authority the maximum period of treatment in the psychopathic ward is three months, and as many even of the recoverable conditions are of longer duration than that, the percentage of those discharged as recovered or much improved is smaller than would otherwise be the case.

With regard to diagnoses, the various psychiatric reaction types were represented, and it will be noted that 9.68% belonged to the organic group, 8.6% to the toxic group, and 49% to the psychogenic group, while 25.81% were not psychotic, but were suffering from some border-line condition or were admitted for observation.

It is interesting to note that of the female patients, in seven or 15.5%, the breakdown followed parturition. This does not mean at all that the mental breakdowns occur to an alarming extent in relation to maternity, but that the psychopathic ward is being made use of for this deserving group of cases. Fortunately in them the outlook is more favourable than in other cases of the same mental reaction type.

TABLE 1

SHOWING THE DISTRIBUTION OF THE ADMISSIONS JAN. 29, 1931-DEC. 31, 1931

Mode	M.	%	F.	%	T.	%
Voluntary	39	82.98	34	73.91	73	78.50
Certificate 1	3	6.38	9	19.57	12	12.90
Certificate 2	1	2.13	1	2.17	2	2.15
Warrant	4	8.51	2	4.35	6	6.45
From Institutions	47		46		93	
Prophylactic (non-psychiatric)	126		66		....

DEPARTMENT OF PUBLIC HEALTH

TABLE 2
SHOWING THE MODE OF DISCHARGE OF PATIENTS ADMITTED,
JAN. 29th, 1931-DEC. 31, 1931

	Male	%	Female	%	Total	%
Recovered	5	10.87	3	8.12	8	9.64
Much improved	3	6.52	5	13.51	8	9.64
Improved	8	17.39	8	21.63	16	19.28
Unimproved	9	19.57	13	35.14	22	26.51
Observation	17	36.93	21	56.77	38	46.79
Deaths	11	23.40	6	16.22	17	20.62
Remaining	2	4.26	0	0.00	2	2.44
Totals	47	100.00	46	100.00	93	100.00
Total Discharged	30	65.19	27	72.99	57	69.69
Returned to Institutions:						
Ponoka	1		1			
Red Deer	0		0			
Oliver	1		0			
Admitted to Institutions:						
Ponoka	12		6			
Red Deer	0		2			
Oliver	1		0			
Deaths	15	32.61	9	24.32	24	28.92
Remaining	1	2.15	1	2.70	2	2.17
Totals	46	100.00	37	100.00	83	100.00
Remaining	1		9		10	
Totals	47		46		93	100.00%

TABLE 3
SHOWING THE DIAGNOSIS OF ADMISSIONS, JAN 29, 1931-DEC. 31, 1931

Classification	M.	F.	T.	Percentage
1 Traumatic psychoses .....	...	...	...	...
2 Senile psychoses	2	2	4	4.30
3 Psychoses with cerebral arteriosclerosis .....	...	...	...	...
4 General paralysis	3	...	3	3.23
5 Psychoses with cerebral syphilis .....	...	...	...	...
7 Psychoses with brain tumor	1	...	1	1.07
8 Psychoses with other brain or nervous disease	1	...	1	1.07
Total Organic Psychoses			9	9.68
9 Alcoholic psychoses	3	1	4	
10 Psychoses due to drugs and other exogenous toxins .....	...	...	4	4.30
12 Psychoses with other somatic disease....	1	3	4	
Total.....			4	4.30
13 Manic-depressive psychoses:				18.28
(a) Manic type	3	3	6	
(b) Depressive type .....	...	1	1	
(c) Other types	1	...	1	
14 Involutional Melancholia	3	3	6	8.60
15 Dementia Praecox:			6	6.45
(a) Simple	1	2	3	
(b) Hebephrenic	1	...	1	
(c) Catatonic	5	11	16	
(d) Paranoid	5	3	8	
16 Paranoid and paranoid conditions.....	3	1	4	30.11
Total Functional Psychoses.....			4	4.30
17 Epileptic psychoses	1	...	1	1.07
18 Psychoneuroses and neuroses:				
(a) Hysterical type	1	4	5	
(b) Psychasthenic type (anxiety and obsessive forms)	1	...	1	
(c) Neurasthenic type	1	1	2	
(d) Other types	2	1	3	
Total			11	11.83

19	Psychoses with psychopathic personality	1	....	1	1.07	
20	Psychoses with mental deficiency .....	....	3	3	3.23	
21	Undiagnosed psychoses .....	....	1	1	1.07	
22	Without psychoses:					
	(a) Epilepsy without psychoses	1	1	2		
	(b) Alcoholism without psychoses.....	....	....	....
	(c) Drug addiction without psychoses	....	....	....
	(d) Psychopathic personality with-					
	out psychoses .....	....	....	....
	(e) Mental deficiency without					
	psychoses	2	3	5		
	(f) Other conditions	5	1	6	13.98	
				13		
	Total all Groups.....				<u>100.00</u>	100.00
	Prophylactic cases (non-psychiatric)....	126	66	192		

TABLE 4
SHOWING THE DIAGNOSIS OF PATIENTS DISCHARGED, TRANSFERRED OR DIED, JAN. 29, 1931-DEC. 31, 1931

Classification	Recovered		Much Imp.		Imp.		Unimp.		Died		Ponoka		Oliver		Red Deer		Observation
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
2 Senile psychoses	1	2	...	...	...	...	1	...	...	...	...	...	...
3 Psychoses with cerebral arteriosclerosis
4 General paralysis	3	...	...	...	...	...	...
5 Psychoses with cerebral syphilis
7 Psychoses with brain tumor	1	...	...	...	...	...	...	...	...
8 Psychoses with other brain or nervous diseases	1	1	...	...	...	...	...	...
9 Alcoholic psychoses	2	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
10 Psychoses due to drugs and other exogenous toxins
12 Psychoses with other somatic disease	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
13 Manic-depressive psychoses:
(a) Manic type	2	...	...	...	1	1	...	...	...	...	2	...	...	...	...	...
(b) Depressive type
(c) Other types	1	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...
14 Involutional melancholia	1	...	...	2	1	...	...	...	...	...	...	...	...
15 Dementia praecox:
(a) Simple	1	...	...	...	...	...
(b) Hebephrenic	1	...	...	...	...	1	...	...	...	...
(c) Catatonic	1	...	...	4	...	1	1	...	4	1	...	...	...	...	...
(d) Paranoid	1	...	...	...	1	...	1	...	...	...	2	1	...	...	...	...	...
16 Paranoia and paranoid conditions	2	...	...	1	...	...	1	...	...	...	...	...	...
17 Epileptic psychoses
18 Psychoneuroses and neuroses:
(a) Hysterical type	1	...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...
(b) Psychasthenic	1	...	...	1	...	...	...	...	...	...	...	...	...	...
(c) Neurasthenic type
(d) Other types	2	...	1	...	...	...	...	...	...	...	...	...	...
19 Psychoses with psychopathic personality	1	...	...	...	...	...	...	...	...	...
20 Psychoses with mental deficiency	1	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...
21 Undiagnosed psychoses
22 Without psychoses:
(a) Epilepsy without psychoses	1	...	...	1	...	...	...	...	...	...	...	...	...
(b) Alcoholism without psychoses
(c) Drug addiction without psychoses
(d) Psychopathic personality without psychoses
(e) Mental deficiency without psychoses	1	...	...
(f) Other conditions	1	2	1	...	...	...	...	...	...	...	...	2	...
(g) Prophylactic cases (non-psychiatric)	126	66	...	...	...	...	...	1	...	...	...	...	...

TABLE 5

SHOWING THE RESIDENCE OF THE PATIENTS ADMITTED,
JAN. 29, 1931-DEC. 31, 1931

Residence	Male	Female	Total
Calgary	4	2	6
Edmonton	25	22	47
Other towns	8	14	22
Rural	10	8	18
Totals.....	47	46	93

TABLE 5A

SHOWING BY WHOM PATIENTS WERE REFERRED

Referred by	Male	Female	Total
Physicians	33	38	71
Mental Hygiene Clinics	2	3	5
Department of Public Health	1	1	2
Dept. of Pensions and National Health.....	1	....	1
Workmen's Compensation Board	1	....	1
Attorney General's Department	1	1	2
Courts	4	1	5
Provincial Institutions	4	2	6
Totals.....	47	46	93

TABLE 6

SHOWING PSYCHOSES IN RELATIONSHIP TO CHILDBIRTH

Post Partum Breakdown	Female	Total
Within one week—Dementia Praecox:		
(c) Catatonic	2	
(d) Paranoid	1	
Reaction depression	2	
	—	5
Within one month—Dementia Praecox:		
(c) Catatonic	1	
(d) Paranoid	1	
	—	2
Previous breakdown had occurred in relation to childbirth	2	
	—	2
Patient pregnant—no relation to breakdown.....	1	1
	—	10

TABLE 7

SHOWING THE NATIVITY OF THE PATIENTS ADMITTED,
JAN. 29, 1931-DEC. 31, 1931

Birthplace	Male	Female	Total	%
Canada:				
Alberta	5	10	15	16.13
British Columbia .....	....	1	1	1.07
Manitoba .....	....	4	4	4.30
Nova Scotia	1	....	1	1.07
Ontario	8	9	17	18.28
Prince Edward Island	2	....	2	2.15
Quebec	1	1	2	2.15
Saskatchewan	1	1	2	2.15
	— 18	— 26	— 44	— 47.30
Britain and other British Dominions:				
England	11	6	17	18.28
Ireland	2	....	2	2.15
Scotland	2	2	4	4.30
India	1	....	1	1.07
	— 16	— 8	— 24	— 25.80
United States of America	3	1	4	4.30
	— 3	— 1	— 4	— 4.30
Other Countries:				
Denmark .....	....	1	1	1.07
Finland	1	....	1	1.07
Norway	1	....	1	1.07
Sweden .....	....	1	1	1.07
Germany	1	1	2	2.15
Austria	2	1	3	3.23
Galicia	1	....	1	1.07
Poland	2	3	5	5.38
Ukraine .....	....	2	2	2.15
Russia	1	1	2	2.15
Syria .....	....	1	1	1.07
China	1	....	1	1.07
	— 10	— 11	— 21	— 22.55
Total	47	46	93	100.00

DEPARTMENT OF PUBLIC HEALTH

TABLE 8

SHOWING THE OCCUPATION OF THE PATIENTS ADMITTED,
JAN. 29, 1931-DEC. 31, 1931

Occupation.	Male.	Female.	Total.	Occupation.	Male.	Female.	Total.
Bank Clerk	1	....	1	Live Stock Dealer	1	....	1
Blacksmith	1	....	1	Maid .....	....	4	4
Butcher	1	....	1	Nil	5	6	11
Clerk	1	2	3	Nurse .....	....	1	1
Clothier	1	....	1	Painter	1	....	1
Coal Dealer	1	....	1	Relief	2	....	2
Contractor	2	....	2	Salesman	2	....	2
Cook	1	....	1	School Inspector	1	....	1
Druggist	1	....	1	School Teacher .....	....	1	1
Engineer	1	....	1	Shipper	1	....	1
Farmer	11	....	11	Stenographer .....	....	2	2
Farm Help	1	....	1	Storekeeper	1	....	1
Fireman	1	....	1	University Student	1	....	1
Housewife .....	....	30	30				
Janitor	2	....	2	Totals.....	47	46	93
Laborer	6	....	6				

TABLE 9

SHOWING THE MARITAL CONDITION AND AGE OF PATIENTS ADMITTED,
JAN. 29, 1931-DEC. 31, 1931

Age	Single		Married		Widowed		Separated		Divorced		Tot.	%
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
10-15	1	....	....	....	....	....	....	....	....	....	1	1.07
16-20	4	5	....	2	....	....	....	....	....	....	11	11.83
21-25	4	4	....	1	....	....	....	1	....	....	10	10.75
26-30	4	3	....	5	....	1	....	....	....	....	13	13.98
31-35	2	....	1	9	....	....	....	....	....	....	12	12.90
36-40	5	....	1	5	....	....	....	....	....	....	11	11.83
41-45	4	....	2	1	1	1	....	....	2	....	11	11.83
46-50 ....	....	....	5	1	....	....	....	1	....	....	7	7.53
51-55	1	....	5	....	....	....	....	....	....	....	6	6.45
56-60	2	....	2	1	....	1	....	1	....	....	7	7.53
61-65 ....	....	....	1	1	....	1	....	....	....	....	3	3.23
66-70 ....	....	....	....	1	....	....	....	....	....	....	1	1.07
Total	27	12	17	27	1	4	0	3	2	0		
%	57.45	26.09	36.17	58.70	2.13	8.70	0	6.52	4.26	0		
	41.94%		47.31%		5.38%		3.23%		2.15%		100.00%	

TABLE 10

SHOWING THE RELIGION OF PATIENTS ADMITTED, JAN. 29, 1931-DEC. 31, 1931

Denomination	Male.	Female.	Total.
Anglican	7	10	17
Baptist	1	....	1
Christian Science	1	....	1
Greek Catholic	3	2	5
Greek Orthodox	1	....	1
Greek Lutheran .....	....	1	1
Jewish	1	1	2
Lutheran	1	5	6
Moravian .....	....	1	1
Orthodox .....	....	1	1
Plymouth Brethren .....	....	1	1
Presbyterian	6	6	12
Protestant	11	4	15
Roman Catholic	13	10	23
United Church	1	3	4
Unitarian .....	....	1	1
Unknown	1	....	1
Totals.....	47	46	93

Mental Hygiene Clinics

It will be remembered that under the able and enthusiastic direction of Dr. C. P. Fitzpatrick, medical superintendent of the Provincial Mental Institute, Oliver, and of Mr. Stuart Jaffary, psychologist and social worker, the first mental hygiene clinic in the Province was held in Edmonton in August, 1929. This was followed by a second in Calgary in October of the same year, and a third in Lethbridge in November, 1930.

The work of the clinics for the early part of 1931 was under the same direction, but unfortunately, through ill-health, Dr. Fitzpatrick severed his connection with the service in July, and in September Mr. Jaffary was granted a year's leave of absence to accept a fellowship in the University of Chicago. Dr. Fitzpatrick's place was taken by Dr. C. A. Baragar until October, when Dr. George A. Davidson, assistant medical superintendent at the Provincial Mental Hospital, Ponoka, took over the direction of the clinics in Calgary and Lethbridge except for a quarterly visit from the Commissioner. In Edmonton during the latter part of the year the clinic has had the assistance of Dr. W. J. McAlister.

Mr. Jaffary's place has been very ably filled by Mr. E. J. Kibblewhite, who had previously acted in a part-time capacity as social worker with the clinic in Edmonton. Miss Agnes Starkie has very satisfactorily taken Mr. Kibblewhite's place in Edmonton.

The Edmonton Mental Hygiene Clinic is held every Tuesday afternoon from 2 to 5 p.m. in the out-patient department of the University Hospital, at 9912 103rd Avenue. The work has been greatly facilitated by the courtesy and co-operation of Miss Young, the nurse in charge, and her staff of workers. Dr. H. E. Smith, of the Department of Philosophy of the University of Alberta, has worked in co-operation with both clinic and schools. His assistance has proved an asset of inestimable value.

The Calgary Clinic is held in the baby clinic quarters of the Police Building fortnightly on Thursday. Here Miss Lavell and Miss Craig, nurses of the Public Health Department, have given unfailing assistance and support.

The Lethbridge Clinic takes place every fourth week on Friday, at the Nursing Mission, except during the summer vacation and the Christmas season. No report of this clinic would be complete without reference to Miss Tilley, who is in charge of the Mission, and whose courtesy, organizing genius and intimate knowledge of the community have proved of the utmost value.

ROUTINE WORK

As will be seen from the accompanying tables there has been a steady increase in the work of the clinics since inception. The new cases have increased from 52 in 1929—a part year—to 142 in 1930 and 354 in 1931, while the cases dealt with as follow-ups, either

at the clinic or by the social worker in the field have risen from 50 in 1930 to 331 in 1931.

Patients visiting the clinic receive a physical (especially neurological) and mental examination, including a psychometric where indicated, and appropriate recommendations are made. For examination for the correction of physical disabilities the patient is referred to his own local physician. For problems arising out of a mental or social mal-adjustment the patient himself, or the parent or guardian, or the referring agency, is advised as to how the case may be dealt with. Interviews with parents or guardians are sought whenever possible, as it is highly desirable to win their confidence and secure their intelligent and sympathetic co-operation in subsequent treatment.

Many different agencies have co-operated in referring cases, as will be seen by Table 4. The large number of school cases in Edmonton is due in a large part to the interest and co-operation of Professor H. E. Smith. Otherwise the chief referring agencies are the Department of Child Welfare, the Juvenile Courts, parents and guardians, doctors and health departments. The interest of these men and women in the welfare of those mentally or socially handicapped is encouraging.

CLASSIFICATION

Table 5 presents a classification of the various problems which constituted the reason for reference to the clinic. Twenty, or 4.9%, were of the pre-school age; 307, or 75.8%, were of the school age; and 78, or 19.3%, were adults; 194 were males and 160 females. Mental defect with or without other problems constituted 37% of the cases. Personality disturbances, delinquency or other behavior disorders accounted for 226, or 55.8% of the cases; epilepsy for 12, or 2.96%; and medical conditions 51, or 12.6%, of the cases. As Mr. Kibblewhite suggested in his report, the age period from 6 to 15 would appear to be the dangerous one for boys, accounting for 75% of the cases, while for girls there is a shifting of the critical period up to the age of 20, but with a more even distribution than with the boys.

RECOMMENDATIONS

Table 6 presents the nature of the recommendations made. Often more than one recommendation was made. In only 34 was institutional treatment suggested, and in 32 no definite recommendation was made. In this connection it may be stated that the greatest obstacle and the most discouraging feature of the work has been the lack of facilities for dealing with the cases presented. The training school is filled to capacity, and with so long a waiting list that only the more urgent cases can be admitted. These cases, so frequently low-grade, crowd out the more hopeful higher grades. Supervised hostels for girls, farm colonies and vocational schools for boys, and even a list of good homes to which appropriate cases could be sent for supervision and training, are greatly needed. In a new country, and particularly at a time of stress, one cannot expect to suddenly acquire all such facilities, but they constitute goals towards which we may work.

It will be noted that 39 cases were recommended for sterilization. Many of these were presented at the quarterly board meetings.

A very interesting group of cases was a series of six presented at the Lethbridge Clinic—not for any behavior problem, but for advice as to choice of vocation and proper guidance through the 'teen years. Whether advice of practical value was given or not, it indicated intelligent and thoughtful parents, and one could predict success in their efforts.

Though the economic situation has prevented active extension of the work of the clinic, it has been so encouraging and has met with such sympathetic co-operation, that an effort should be made to carry it to other parts of the Province.

TABLE No. 1
SUMMARY OF CASES PRESENTED AND FOLLOW-UP REPORTS
FOR THE YEARS 1929-31

Clinic	1929	1930		1931		Total	
	Cases	New Cases	Follow Ups	New Cases	Follow Ups	New Cases	Follow Ups
Edmonton	31	112	1	201	127	344	128
Calgary	21	113	49	95	151	288	200
Lethbridge .....	....	17	....	58	53	75	53
Sub-totals	52	142	50	354	332	647	381
Totals		192		685		1,028	

TABLE No. 2
AGE AND SEX CLASSIFICATION

Age	Edmonton			Calgary			Lethbridge			Totals			Percentage		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0-5 years	4	5	9	4	5	9	2	3	5	10	13	23	5.2	8.1	6.5
6-10 years	43	24	67	16	4	20	2	4	6	61	32	93	31.4	20.0	26.3
11-15 years	51	27	78	16	16	32	18	2	20	85	45	130	43.8	28.1	36.7
16-20 years	10	12	22	5	15	20	6	5	11	21	32	53	10.8	20.0	14.9
21-25 years .....	....	4	4	....	5	5	2	....	2	2	9	11	1.0	5.6	3.0
26-30 years	3	5	8	....	....	....	1	1	3	3	6	9	1.5	3.8	2.5
31 years	5	18	13	4	5	9	3	10	13	12	23	35	6.2	14.4	10.0

TABLE No. 3
CLASSIFICATION ACCORDING TO INTELLIGENCE QUOTIENT

I.Q.	Edmonton			Calgary			Lethbridge			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
-25 .....	....	....	....	....	4	4	....	1	1	....	5	5
26-50	7	11	18	3	5	8	1	6	7	11	22	33
51-60	6	7	13	....	....	....	....	....	....	....	....	....
61-70	17	10	27	10	15	25	6	1	7	51	42	93
71-75	12	9	21	....	....	....	....	....	....	....	....	....
Totals	42	37	79	13	24	37	7	8	15	62	69	131

Of the new cases:

- 1.41% had an I.Q. of 25 or less.
- 9.32% had an I.Q. of between 26 and 50.
- 26.27% had an I.Q. of between 50 and 75.
- and 37% had an I.Q. of 75 or less.

TABLE No. 4
AGENCIES REFERRING CASES

Agency	Edmonton	Calgary	Lethbridge	Total
Department of Child Welfare	17	15	....	32
Children's Aid Relief Department (City).....	....	12	....	12
Juvenile Courts	9	8	10	27
Other Courts and Police	2	....	3	5
City Schools	107	10	2	119
Parents and Guardians	10	16	10	36
Homes: Kiwanis	9	....	....	9
Mount View .....	....	12	....	12
Woods' Christian Home .....	....	3	....	3
Salvation Army	2	1	....	3
Local Council of Women .....	....	....	3	3
U. F. W. A. .....	....	....	3	3
Civic Relief Department	6	....	....	6
City Doctors	11	3	11	25
Other Clinics	11	....	....	11
Nursing Mission .....	....	....	6	6
City Health Department	4	....	....	4
Provincial Health Department	8	10	1	19
Other Agencies	5	5	9	19
Totals.....	201	95	58	354

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 5
CLASSIFICATION OF CASES

Classification	Edmonton	Calgary	Lethbridge	Total
Pre-school age:				
For examination, no trouble	2	5	....	7
Discipline or conduct problems without defect .....	....	2	1	3
Mental defect	4	2	1	7
Mental defect with epilepsy .....	....	2	1	3
	— 6	— 11	— 3	— 20
School age:				
Vocational guidance only, no defect.....	30	....	6	36
Mental defect	28	8	5	41
Mental defect with behavior problems.....	55	17	2	74
Personality defect	8	7	2	17
Behavior problems without defect	62	14	8	84
Delinquency, stealing, etc.	21	10	....	31
Backwardness without defect	3	5	2	10
Epilepsy	2	3	1	6
Nervous, excitable, with physical condition	1	....	4	5
Medical care	2	....	1	3
	— 212	— 64	— 31	— 307
Adults:				
Mental defect	7	5	3	15
Mental defect with sex delinquency	8	2	3	13
Mental defect with epilepsy	2	1	....	3
Delinquency without defect .....	....	2	....	2
Sex delinquency without defect .....	....	....	2	2
Psychotic or prepsychotic	15	9	8	32
Chronic encephalitis	1	....	1	2
Medical	4	1	4	9
	— 37	— 20	— 21	— 78
Totals.....	255	95	55	405

TABLE No. 6
CHIEF RECOMMENDATIONS AS TO TREATMENT

	Edmonton	Calgary	Lethbridge	Total
Continuation of present home of institutional treatment	21	21	5	47
Change in home discipline and treatment.....	14	15	13	42
Change in school discipline	46	2	....	48
Continue school, but with vocational emphasis	3	....	2	5
Change in study methods	1	....	....	1
Advanced academic or professional training..	....	....	2	2
Training in self-discipline	4	....	....	4
More organized social life: Y.M.C.A., Y.W.C.A., Scouts, etc.	1	5	5	11
Placement in good homes	13	4	....	17
Close supervision	18	11	6	35
Medical treatment, including attention of specialists	14	8	17	39
Admission to special classes	12	8	....	20
Admission to Provincial Training School.....	6	11	....	17
Admission to Provincial Mental Hospital.....	6	5	4	15
Admission to Industrial School	2	....	....	2
Deportation	4	1	....	5
Other recommendations	9	4	....	13
No definite recommendation	28	....	4	32
	— 206	— 95	— 58	— 359
Totals	206	95	58	359

Provincial Mental Hospital, Ponoka

(C. A. BARAGAR, *M.D.*, *Acting Medical Superintendent*)

The movement of patients is set forth in Table 1. At the beginning of the year there were 1,103 patients in residence—600 male and 503 female. At the close of the year there were 1,195 patients—672 male and 523 female, a net increase of 92, or 8.43%.

The admissions were 388 as compared with 389 of the preceding year. Of these, 324, or 83.5%, were first admissions so far as this Province is concerned, and 62, or 16%, were re-admissions. In addition some 26 patients were returned to the hospital from elopement, leave of absence or general hospitals.

Of the admissions 67, or 17.27%, were by voluntary application; 50, or 12.89%, by medical certificate, and 248, or 63.94%, by warrant. The great increase in the number of voluntary admissions from 9% in 1930 to 17.27% in 1931 is accounted for by the large number (33) of cases of neurosyphilis without psychosis admitted for malarial treatment.

Of the admissions 155, or 40% were Canadian born; 78, or 20%, were native of Great Britain or the other British Dominions, and 155, or 40%, were foreign born, including 64, or 16.5%, who originated from the United States.

With regard to the diagnoses of patients admitted during the year, there has been a distinct increase in the number of those suffering from mental disturbances associated with old age, and an increase in the number of general paralytics, as well as a sharp increase in the number of non-psychotic neurosyphilitics.

A total of 1,520 patients were treated within the twelve months.

During the year 224 patients were discharged, 3 were transferred to other institutions, 27 were deported, and 60 died, totalling altogether 314. The discharge rate as distinct from transfers, deportations and deaths was 57.73% of the total admission rate.

The recovery rate based on the admissions for the year—less those “without psychosis”—was for males 18.5%, for females 39.3%, and for both sexes combined 25.7%.

For the ten-year period—1922 to 1931—the mean recovery rate for males has been 26.85%, for female 35.73%, and for both sexes combined 30.46%. It is interesting to note that according to this the recovery rate for women is 33% more favourable than for men.

The death rate based on the total number under treatment and observation was for males 4.5%, for females 3.21%, and for both sexes 3.95%. This, considering the increase in senile cases, is exceedingly low, and is the third lowest in the history of the hospital. Over a twenty-year period the average death rate for men has been 6.05%, for women 4.43%, and for both sexes 5.46%. Here again it is interesting to note that the prognosis with respect to life is nearly 27% more favourable for women than for men.

An analysis of the deaths shows that infection of various sorts constitute the major group of causes (33.33%), and that among these respiratory infections, especially of the lungs (30%), predominate. Tuberculosis alone was responsible for 10% of the deaths. Typhoid fever unfortunately accounts for three of the deaths. Senile conditions, apart from the infections, featured as the main cause in 13.33%, general paresis in 5%, and cardiac conditions in 11.67%. It is a matter of deep regret that three patients succeeded in committing suicide. One patient is believed to have died as a result of an accidental injury to the head while riding on a train following elopement, and one died by drowning while in an epileptic seizure.

ACCIDENTS

In any moderately-sized community accidents occur, and in an institution housing so many patients close together, some of whom are old and irritable and some impulsive, one might expect many serious accidents. As a matter of fact, there have been few. Constant vigilance and tact upon the part of the nursing and attendant staff is the price that must be paid for this. On the men's side there were two fractures of limbs, a fracture of the skull in a fall from a train, and a drowning during an epileptic seizure, as referred to above. On the women's side there were five fractures and a severe laceration.

GENERAL HEALTH

In general, the health of both patients and staff has been good. Unfortunately a small epidemic of typhoid fever, involving 11 cases, including one nurse, occurred in the women's wards. The source of this has not yet been determined. An investigation revealed a number of patients with a positive widals. Of these the stools and urine were repeatedly examined, and one carrier discovered. Isolation of that carrier did not, however, stop the occasional occurrence of further cases. Subsequently both female staff and patients were inoculated, but even this failed to absolutely check the incidence of cases.

All members of the staff are given a careful physical examination shortly after appointment.

STAFF

On August 15th, Dr. E. H. Cooke, who had been medical superintendent since 1916, resigned, and the writer was appointed acting superintendent until a new permanent appointment could be made.

On September 15th, Dr. Geo. A. Davidson, formerly senior assistant physician in charge of the reception service at the Brandon Mental Hospital, was appointed assistant superintendent in place of Dr. D. L. McCullough, who had been promoted to acting medical superintendent of the Provincial Training School, Red Deer.

Dr. R. R. MacLean, who has been absent on post-graduate work in Boston, London and Zurich, is expected to return to the service as senior assistant physician early in the new year.

Dr. William Lyall Valens, who resigned on May 26th to undertake post-graduate work in Boston, was re-appointed December

7th, and was transferred to the Provincial Mental Institute, Oliver, on December 31st.

Dr. E. G. Simmonds was appointed temporary pathologist September 26th.

Dr. Ivar Lefsrud was appointed July 1, 1931, and on October 1st was transferred to the Provincial Mental Institute, Oliver.

Mr. W. T. Watt filled the temporary appointment of student interne during the summer months.

Mr. Stuart Jaffary, part-time social worker, was granted leave of absence for post-graduate work in Chicago as from October 1st, and his place was taken by Mr. E. J. Kibblewhite.

Miss C. N. Jackson resigned September 21st to pursue advanced work in nursing at the University of Alberta, and her place was taken by Miss Selma Erickson.

In view of the size of the patient population of the hospital and the large annual admission rate, the number of medical officers is considerably below the standard regarded as desirable. Medical clerical assistance is also inadequate if records are to be kept up to date. For the sake of economy, so urgent at the present time, every effort is being made to carry through without additional help.

CLINICAL WORK AND REORGANIZATION

On account of the large admission rate, routine, physical and psychiatric examinations, medical care of infirm cases, ward rounds and reviews for purposes of discharge, parole, or other reasons have made heavy demands on the time of the medical staff.

Medical staff conferences were reorganized and set for 8:30 a.m. Tuesdays and Thursdays, and for 1:15 p.m. Wednesdays and Fridays, with a view to having all new cases thoroughly worked up and presented to the medical staff as a group as soon after admission as practicable.

The mode of admission was changed. A special admission room was established off Female Ward 7, with an admission bell calling the nurse on duty there, thus obviating the delays that so frequently occurred when admissions took place at the main office. With this change arrangements were made for the personal interview and preliminary examination of each patient by a physician at the time of admission.

The ward arrangement was reorganized to some extent so as to permit of greater classification of patients on admission, for the assembling of physically ill patients in special infirm wards, and for the more effective classification of all patients on the chronic wards of the hospital.

To facilitate the work of the medical officers and to stress the importance of their clinical work and their responsibility for direction and control of treatment, their offices were decentralized. Formerly they were grouped in the administration section. Now they have their offices on the wards in close proximity to the patients, especially of the reception services.

With the appointment of a pathologist, a more thorough laboratory investigation of cases should now be possible.

The use of the malarial treatment as a prophylactic measure in cases of early neurosyphilis, that is, before any mental symptoms

had developed, was inaugurated at the suggestion of and in collaboration with Dr. Harold Orr and his co-workers of the Social Hygiene Division. These patients are now admitted by voluntary application, are inoculated, carried through the series of malarial rigors, and as soon after the termination of the malaria as possible are returned to the provincial clinics for the rest of their treatment. The following is a synopsis of the malarial treatment during the year:

General paresis	19 cases
Tabo-paresis	11 "
Cerebral syphilis	2 "
Tabes dorsalis	6 "
Asymptomatic neurosyphilis	23 "
	<hr/>
	61 cases

Since his appointment Dr. Geo. A. Davidson has been taking charge of the Mental Hygiene Clinics at Calgary and Lethbridge, which occur fortnightly and monthly respectively.

DENTAL CLINIC

The dental work under the direction of Dr. S. M. Snedden has been carried along very successfully throughout the year. The value of this work can scarcely be over-estimated.

Summary of the work:

Full upper and lower dentures....	70	Prophylaxis	36
Partial upper dentures	7	Fillings	140
Partial lower dentures	6	Gold inlays	5
Rebasing dentures	7	X-rayed	32
Relining dentures	7	General anaesthetics	3
Repaired dentures	29	Extractions	925
Scalings	152	Examination and treatments.....	1,103
Treatments	204	Repaired bridge steel facings	1

HYDROTHERAPY

Extensive use of the hydrotherapy equipment has been made, some fourteen continuous baths on the men's wards and eight on the women's wards being in frequent and almost continuous operation. This has been supplemented by packs and electric cabinets.

OCCUPATIONAL THERAPY

Formal occupational therapy has been carried on throughout the year. This work has, however, been handicapped by limitation of accommodation and equipment. Some occupational work is being done on the wards as well. There are, however, great possibilities for extension of occupational activities, both of the purely therapeutic and of the industrial form. Properly applied under competent psychiatric and technical direction, it is the most important single therapeutic agent we have outside the influence of personal contacts and relationships. It must be remembered, however, that industrial occupation is a two-edged weapon. The intentional or unintentional injection of an element of exploitation might do much harm. It is important, therefore, that the objectives of both personal and direct institutional benefit be kept prominently in mind in all occupational activities.

SOCIAL SERVICE

The hospital social worker devotes most of his time to the work of the Mental Hygiene clinics, part of it to field reports with re-

spect to patients in the hospital, and part of it doing psychometric examinations for the medical staff. Owing, however, to the great area of the Province and the scattered state of its population, effective social work is here faced with many difficulties.

TRAINING SCHOOL

The work of training both nurses and attendants inaugurated in the fall of 1930 proceeded throughout the balance of the term, and was resumed again in the fall. In the spring 10 young women and 39 attendants completed the first year of their respective courses, and in October another class of 22 nurses and one of 22 men commenced the study course.

The importance of this training cannot be over-estimated. The intelligent and sympathetic nursing care of mental patients is dependent on such training even more, if possible, than in general nursing. It was vitally important that it be commenced without delay. It has entailed much additional labour on the part of medical and senior nursing staff, but that contribution has been made in generous measure.

POST-GRADUATE WORK

In January a course of lectures in psychiatry was commenced for a group of general hospital graduates on the staff. Of these, 12 successfully completed the examinations and 11 received certificates covering a period of six months' lectures and experience. In October a second course was commenced for another group of 12 nurses. This course included a small series of clinics as well. While this also involves additional work, it is regarded as a contribution to nursing education, and thus indirectly to the general good.

LIBRARIES

Both general and medical libraries are inadequate and out-of-date for an institution of the size and importance of this. On accounts of its isolation much more consideration must be given to its library needs than for an institution situated near a large centre.

RELIGIOUS SERVICES

Religious services are held every Sunday, denominational ministers from Ponoka and Wetaskiwin taking charge in rotation. In addition, pastoral work and special services are attended to by the same ministers. The interest and labours of these good friends of the hospital are much appreciated.

RECREATION AND ENTERTAINMENT

Throughout the year a weekly picture show is an event of importance. Owing, however, to the general use of the "talkie," it will probably become increasingly difficult to get good silent pictures.

Patients' dances were held fortnightly throughout the season, and were patronized by a large number of patients. By gradually getting away from the stereotyped hospital clothing for patients on such occasions, it is hoped to improve the general appearance of these functions and increase the enjoyment of all.

Once again owing to our isolation entertainments are not so frequent as one might wish. We have, however, to thank the Oliver troupe of players and our own staff and their friends for a few such enjoyable functions.

The patients and staff sports field day was held on August 27th, and was favoured by a large turn-out of patients, staff, and a number of interested friends from Ponoka.

The open-air skating rink was overhauled and put into shape, and contributed greatly to the pleasure of both patients and staff.

On the evening of December 23rd a Christmas tree was held for patients. The distribution of presents was preceded by a presentation of Christmas carols sung by a volunteer hospital choir and illustrated by a series of tableaux well staged by members of the staff.

The hospital football team under the direction of Mr. John Spinks and Mr. Mitchell, who were captains, captured four trophies—the Red Deer Challenge Cup, the Lacombe Challenge Cup, the Ponoka Challenge Cup, and the Tip Top Tailors Cup. As many of the games were played on the hospital grounds, patients as well as staff were able to enjoy them as spectators.

A series of enjoyable staff dances took place during the autumn, and more were planned for the balance of the season. The most important staff social event of the year, however, was the "At Home" held in the recreation hall on the evening of December 29th. The first part of the programme was a Christmas tree, games and later supper for the children, and afterwards a dance and supper for the grown-ups. Every effort was put forth to make it possible for every member of the staff and their families to be present. Its success was assured by the large number who were there.

The whole aim has been to so mobilize the social assets and facilities of the hospital as to increase the happiness of both staff and patients and promote a spirit of co-operation.

VISITORS

Many visitors have come to the hospital to see friends who were patients here. In general, these visits have been encouraged, and notwithstanding the heavy demands on the time of physicians an effort has been made to have personal interviews with them, and thus engender a spirit of confidence in the work of the hospital as well as to gain outside information regarding the patient.

Official visitors, professional, departmental and otherwise, have come to the hospital. Their interest is always welcome.

ACCOMMODATION—ALTERATIONS

Notwithstanding recent additions in the way of new buildings, it seems impossible to overtake the state of overcrowding, and to provide adequately for occupational and recreational activities. Lack of accommodation is a particularly urgent problem on the women's side of the hospital.

Certain alterations have been carried out during the year. Others are desirable, particularly to provide more lavatory and toilet accommodation on Male Ward 4, and with respect to breaking up

one of the dormitories in the women's reception building to provide a little more privacy for the convalescent patient.

DEPARTMENTAL ACTIVITIES

Laundry.

With increasing demands the laundry is fast outgrowing its accommodation and equipment. It is taxed to the limit of its capacity. During the year 1,308,427 pieces were put through, or a monthly average of over 125,000.

Tailor Shop.

This is one of the busiest and steadiest departments of the hospital, and not only does a large amount of useful work, but provides occupation for a relatively large group of patients.

Summary of work:

Blue uniforms	61	Smocks	59
Blue pants	56	Cooks' caps	18
Blue patient's suit	1	Cooks' coats	47
Corduroy coats	408	Cooks' pants	45
Corduroy pants	914	Attendants' coats	66
Shirts	1,153	Rubber sheets	343
Sheets	2,235	Rubber aprons	7
Nightgowns	489	Kitchen aprons	108
Nightshirts	206	Bath hammocks	38
Pillow cases	834	Bath covers	21
Recovered mattresses	115	Straight jackets	11
Pillow ticks	217	Restraint suits	2
Strong blankets	6	Milk wagon covers	1
Towels	908	Draw sheets	77
Table cloths	33	Store cloth blankets	28

Occupational Carpenter Shop.

By the occupational carpenter shop, repairs have been done to almost innumerable beds, blocks, brushes, etc., also repairs to buildings, laying of tiles, building fences, manufacture of articles for the occupational therapy department, etc.

Sewing Room.

Summary of work:

Petticoats	676	Nightgowns	410
Uniforms	275	Belts	246
Aprons	377	Caps	179
Bibs	307	Gingham dresses	716
Uniform repairs	140	Strong dresses	216
Bandages	41	Rubber sheets	140
Shrouds	61	Collars	13
Bathrobes	51	Table cloths	77
Restraint dresses	40	Serviettes	267
Doctors' gowns	18	Screen fittings	9
Pillow cases	1,009	Draw sheets	13
Towels	1,445	Patients' dresses	94

Stores.

In this department increasing demands have outgrown accommodation.

Kitchens and Dining Rooms.

With the increase in patient population and staff, the work here has outstripped facilities and space. The serving of over 4,000 meals per day is no small problem. The kitchen is unduly crowded and the vegetable room badly placed and unsanitary. Radical alterations are required. Notwithstanding this handicap, the dietitian and chef and their staff are doing remarkably fine work.

Plans for instituting the cafeteria system in patients' dining rooms are under way.

Garden and Grounds.

Under the general direction of Mr. Alex. Paton, provincial gardener, extensive recreation grounds for patients have been laid out and are taking shape to the south and west of the men's division of the institution. Very fine rock borders have been constructed in front of the main building.

The gardener has attained commendable success in providing the hospital, especially the wards, with an uninterrupted supply of foliage and flowering plants and cut flowers. Also a supply of garden vegetables has been produced for general consumption.

Farm.

A complete report of farm activities will be submitted under separate cover. The farm is an integral and important part of the institution. As such it provides open air occupation of excellent type for male patients, and as a result of their activities they benefit not only in general mental and physical health, but indirectly in a material way by the provision of a large supply of milk, eggs, pork and field vegetables. By some minor changes the patient accommodation at the farm colony building has been increased from 40 to 56, permitting advantage to be taken of farm occupation for a greater number of patients.

TABLE No. 1
MOVEMENT OF PATIENT POPULATION DURING 1931

	M.	F.	Total	M.	F.	Total
In residence, Jan. 1, 1931	600	503	1,103	.....	.....	.....
On leave of absence or otherwise absent .....	.....	1	1	600	504	1,104
Admissions during year:						
(a) First admissions	219	105	324	.....	.....	.....
(b) Re-admissions	35	27	62	.....	.....	.....
(c) Transfers from other hospitals.....	.....	2	2	254	134	388
(d) Returns	12	16	28	12	16	28
Total received during year .....	.....	.....	.....	266	150	416
Total on books during year .....	.....	.....	.....	866	654	1,520
Discharged during year:						
(a) As recovered	39	44	83	.....	.....	.....
(b) As improved	45	27	72	.....	.....	.....
(c) As unimproved	6	18	24	.....	.....	.....
(d) As without psychosis	30	15	45	.....	.....	.....
(e) Transferred to other hospitals	1	2	3	.....	.....	.....
(f) Deported to other countries	24	3	27	.....	.....	.....
(g) Deaths	39	21	60	.....	.....	.....
Total separations during year .....	.....	.....	.....	184	130	314
In residence at end of year	672	523	1,195	.....	.....	.....
On leave of absence or otherwise absent.....	10	1	11	.....	.....	.....
Total patients at end of year .....	.....	.....	.....	682	524	1,196

TABLE No. 2
SHOWING THE PSYCHOSES IN THOSE ADMITTED DURING 1931

Psychoses	Male	Female	Total
1 Traumatic psychoses .....	....	1	1
2 Senile psychoses	9	7	16
3 Psychoses with cerebral arteriosclerosis.....	26	3	29
4 General Paralysis	23	4	27
5 Psychoses with cerebral syphilis.....	2	....	2
6 Psychoses with Huntington's Chorea.....	....	1	1
7 Psychoses with brain tumor	2	1	3
8 Psychoses with other brain or nervous diseases:			
(a) Chronic encephalitis	2	....	2
(b) Hydrocephalus	1	....	1
(c) Disseminated sclerosis	1	....	1
(d) Sub-acute combined	1	....	1
9 Alcoholic psychoses	4	2	6
10 Psychoses due to drugs and other exogenous toxins	1	....	1
11 Psychoses with pellagra .....	....	....	....
12 Psychoses with other somatic diseases:			
(a) Post-infectious psychosis .....	....	2	2
(b) Exhaustion delirium .....	....	1	1
(c) Septicaemia	1	....	1
(d) Diabetes	1	....	1
13 Manic-depressive psychoses:			
(a) Manic type	11	10	21
(b) Depressive type	6	16	22
(c) Mixed	1	....	1
14 Involuntional melancholia	3	5	8
15 Dementia Praecox (Schizophrenia):			
(a) Paranoid type	28	9	37
(b) Catatonic type	39	22	61
(c) Hebephrenic type	7	5	12
(d) Simple type	3	2	5
(e) Undefined type	1	....	1
16 Paranoia and paranoid conditions	16	4	20
17 Epileptic psychoses	4	6	10
18 Psychoneuroses and neuroses:			
(a) Hysterical type .....	....	2	2
(b) Psychasthenic type (anxiety and obsessive forms)	3	....	3
(c) neurasthenic type	1	....	1
19 Psychoses with psychopathic personality.....	1	....	1
20 Psychoses with mental deficiency	10	8	18
21 Undiagnosed psychoses	3	1	4
22 Without psychoses:			
(a) Epilepsy without psychoses.....	....	1	1
(b) Alcoholism without psychoses.....	4	....	4
(c) Drug addiction without psychoses.....	6	5	11
(d) Mental deficiency without psychoses	6	5	11
(e) Neuro-syphilis without psychoses.....	23	10	33
(f) Congenital syphilis .....	....	1	1
(g) Post encephalitic disorder	1	....	1
(h) Situational reaction	1	....	1
(i) Criminal offence	2	....	2
Total.....	254	184	388

TABLE No. 4
AGES OF PATIENTS ADMITTED DURING 1931

Ages	First Admissions		Re-admissions		Total	
	Male	Female	Male	Female	Male	Female
Under 15 years	1	1	....	....	1	1
15 to 19	8	11	....	2	8	13
20 to 24	17	11	4	2	21	13
25 to 29	24	16	4	3	28	19
30 to 34	26	11	5	2	31	13
35 to 39	25	13	8	6	33	19
40 to 44	21	9	6	5	27	14
45 to 49	23	8	1	4	24	12
50 to 54	29	7	3	2	32	9
55 to 59	19	5	4	1	23	6
60 to 64	5	3	....	2	5	5
65 to 69	7	4	....	....	7	4
70 and over	14	6	....	....	14	6
Total	219	105	35	29	254	134

TABLE No. 5
NATIVITIES OF PATIENTS ADMITTED DURING 1931

Nativity	Male	Female	Total	Nativity	Male	Female	Total
Canada	93	62	155	Italy	3	....	3
England	30	19	49	Lithuania	....	1	1
Scotland	10	7	17	Norway	8	....	8
Ireland	4	2	6	Poland	13	4	17
Wales	3	2	5	Roumania	4	1	5
Newfoundland	....	1	1	Russia	5	5	10
Austria	5	2	7	Sweden	6	1	7
China	3	....	3	Switzerland	3	....	3
Czecho-Slovakia	4	1	5	Turkey	1	....	1
Denmark	3	....	3	Ukraine	5	1	6
Finland	2	....	2	U.S.A.	42	22	64
Germany	5	3	8				
Holland	1	....	1				
Hungary	1	....	1				
					254	134	388

TABLE No. 6
DISCHARGES, CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES AND
CONDITION ON DISCHARGE, FOR THE YEAR 1931

Psychoses	Total			Recovered			Improved			Unimproved			Without Psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1 Traumatic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2 Senile	....	2	2	....	....	....	....	1	1	....	1	1	....	....	....
3 With cerebral arterio-sclerosis	9	....	9	3	....	3	5	....	5	1	....	1	....	....	....
4 General paralysis	11	....	11	2	....	2	9	....	9	....	....	....	....	....	....
5 With cerebral syphilis	4	....	4	1	....	1	3	....	3	....	....	....	....	....	....
6 With Huntington's Chorea	....	1	1	....	....	....	....	....	....	....	1	1	....	....	....
7 With brain tumor	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
8 With other brain or nervous disease	2	....	2	....	....	....	2	....	2	....	....	....	....	....	....
9 Alcoholic psychoses	3	2	5	....	....	....	3	2	5	....	....	....	....	....	....
10 Due to drugs and other exogenous toxins	1	....	1	1	....	1	....	....	....	....	....	....	....	....	....
11 With pellagra	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
12 With other somatic disease	....	2	2	....	1	1	....	1	1	....	....	....	....	....	....
13 Manic-depressive	15	21	36	10	14	24	4	7	11	1	....	1	....	....	....
14 Involutional melancholia	1	3	4	1	2	3	....	....	....	....	1	1	....	....	....
15 Dementia praecox	44	38	82	20	17	37	21	11	32	3	10	13	....	....	....
16 Paranoia and paranoid conditions	9	4	13	2	2	4	4	2	6	3	....	3	....	....	....
17 Epileptic psychoses	6	4	10	....	....	....	3	2	5	3	2	5	....	....	....
18 Psychoneuroses and neuroses	5	3	8	....	2	2	5	....	5	....	1	1	....	....	....
19 With psychopathic personality	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
20 With mental deficiency	4	11	15	2	5	7	1	4	5	1	2	3	....	....	....
21 Undiagnosed psychoses	....	1	1	....	1	1	....	....	....	....	....	....	....	....	....
22 Without psychoses	30	15	45	....	....	....	....	....	....	....	....	....	30	15	45
Total	144	107	251	42	44	86	60	30	90	12	18	30	30	15	45

TABLE No. 7
RECORD OF DEATHS DURING 1931

Register No.	Sex.	Age.	Time in Hospital.			Cause of Death
			Years.	Months.	Days.	
3402	F	16	4	9	....	Chronic pulmonary tuberculosis.
4902	M	48	....	7	....	Prolonged confusional attack; Myocardial degeneration.
4940	M	61	....	5	27	Senile dementia.
5116	M	71	....	....	7	Senile dementia.

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 7—Continued

Register No.	Sex.	Age.	Time in Hospital.			Cause of Death
			Years.	Months.	Days.	
4835	M	38	....	9	10	Fracture of skull, Haemorrhage.
5084	F	75	....	1	8	Senile dementia.
85	M	63	19	5	27	Erysipelas of face and arms.
5131	F	68	....	....	10	Acute Cardiac failure.
4054	M	70	1	11	17	Senile dementia.
4070	M	50	2	11	7	Large supra-pituitary tumor
4953	M	64	....	7	18	Fracture of vault of head.
3950	F	63	3	3	4	Typhoid fever.
5042	F	39	....	3	23	Not ascertained.
4571	M	61	1	7	7	Myocardial degeneration; general paresis.
5162	M	35	....	1	12	Suicide by hanging.
107	M	76	19	8	9	Pernicious anaemia.
3956	M	38	3	5	3	Cerebellar tumor.
5217	M	76	....	....	12	Arteriosclerotic dementia.
5129	M	78	....	3	12	Arteriosclerosis; Myocardial degeneration.
4925	M	60	....	9	24	Acute bronchitis; Senile dementia.
2966	M	31	6	10	18	Toxaemia, Balanitis and Scrotal slough, Facial erysipelas.
5196	F	29	....	1	16	Ascending pyelo-nephritis, Cystitis.
5243	M	45	....	1	2	Broncho-pneumonia.
5209	M	23	....	1	29	Broncho-pneumonia, Acute catatonic excitement.
5236	M	52	....	1	12	General paralysis.
4976	F	82	....	3	16	Strangulated hernia; Senile dementia.
5199	M	59	....	2	10	Pneumonia with empyema; Toxaemia.
4920	F	42	....	11	24	Suicide by drowning.
5248	F	56	....	1	12	Broncho-pneumonia; General paresis.
5184	M	80	....	3	2	Carcinoma of the pancreas.
5068	M	20	....	7	2	Acute infection of larynx and mediastinum.
2780	F	25	7	10	14	Pulmonary tuberculosis.
962	F	52	15	1	17	Double broncho-pneumonia; Typhoid fever.
4621	M	38	1	10	18	Pulmonary tuberculosis.
5312	M	67	....	....	16	Cerebral arteriosclerosis.
807	M	37	16	1	....	Typhoid fever; Ruptured spleen.
5229	M	28	....	3	9	Not determined.
3909	M	55	3	11	5	Cardiac failure due to pressure of distended stomach.
4584	M	45	2	....	13	Drowning whilst having an epileptic seizure.
945	F	53	15	3	....	Broncho-pneumonia.
805	M	40	16	1	20	Heart failure due to administration of anaesthetic.
5374	M	59	....	....	18	Arteriosclerotic dementia.
5391	F	52	....	....	7	Cerebral tumor.
2726	F	38	8	3	5	Broncho-pneumonia, fractured right fibula; Epilepsy.
5396	M	42	....	....	15	Hypostatic congestion, Dementia praecox (catatonic).
4303	F	44	2	11	12	Pulmonary tuberculosis.
3911	F	23	4	....	19	Septic sore throat, Dementia praecox.
5356	F	52	....	1	27	Acute fibrinous bronchitis, Involutional melancholia.
5415	M	47	....	....	14	Broncho-pneumonia.
4098	M	69	3	6	10	Cerebral apoplexy with right hemiplegia.
5390	M	80	....	1	5	Exhaustion and Hypostatic congestion.
5439	F	74	....	....	11	Broncho-pneumonia, Senile psychoses.
795	M	56	16	4	9	Pulmonary tuberculosis, Amyloid disease.
3761	M	53	4	6	26	General paralysis, Exhaustion.
4858	F	22	1	7	....	Strangulation by hanging.
1353	M	34	13	8	25	Idiopathic epilepsy; Status epilepticus.
5445	M	56	....	....	26	Cerebral tumor.
3484	F	87	5	6	....	Arteriosclerosis, Heart failure.
3264	M	22	6	4	10	Chronic encephalitis.

TABLE No. 8

PLACE OF RESIDENCE AT TIME OF COMMITTAL, 1931

Place.	Male	Female	Total	Place.	Male	Female	Total
Acadia Valley	1	1	2	Black Diamond	1	....	1
Acme	1	1	2	Blackie .....	....	1	1
Alberta Beach	1	1	2	Blairmore	1	1	2
Alcomdale	1	....	1	Bon Accord .....	....	1	1
Alexis	1	1	2	Bonnyville	2	1	3
Andrew	1	....	1	Boscombe	1	....	1
Arrowwood	1	....	1	Breton .....	....	2	2
Athabasca	1	1	2	Brooks .....	....	1	1
Banff .....	....	2	2	Bruderheim .....	....	1	1
Barkerville	1	....	1	Buck Lake	1	....	1
Barons	1	....	1	Buford .....	....	1	1
Bashaw .....	....	1	1	Bull's Head	1	....	1
Bassano .....	....	1	1	Calgary	37	21	58
Bear Lake	1	....	1	Calmar	1	....	1
Beaver Dam	1	....	1	Camrose	2	2	4
Bellevue	1	....	1	Carmangay .....	....	1	1
Beiseker .....	....	1	1	Cardston	1	....	1
Bellis .....	....	1	1	Cassils .....	....	1	1
Beverley .....	....	1	1	Carstairs	1	1	2
Bissell .....	....	1	1	Castor	2	1	3

TABLE No. 8—Continued

Place.	Male	Female	Total	Place.	Male	Female	Total
Carvel .....	...	1	1	Mannville	1	1	2
Clareholm	2	1	3	Markerville	2	...	2
Chigwell .....	...	1	1	Mayerthorpe	1	...	1
Clive	1	1	2	McLennan	1	...	1
Clyde	2	...	2	McMurray	1	...	1
Coalhurst .....	...	1	1	Medicine Hat	4	5	9
Cold Lake .....	...	1	1	Millet	1	1	2
Coleman	1	...	1	Mirror	1	1	2
Condor	1	...	1	Minburn .....	...	1	1
Cosmos .....	...	1	1	Monarch	2	...	2
Dapp	1	...	1	Morinville	1	...	1
Didsbury	1	...	1	Mountain View	1	...	1
Donalda	2	...	2	Mundare	2	1	3
Donnelly	1	...	1	Musidora .....	...	1	1
Dorelee .....	...	1	1	Nampa .....	...	1	1
Dorothy	1	...	1	Nanton .....	...	1	1
Drumheller	4	...	4	Nevis	1	...	1
Duhamel	1	...	1	Newbrook	1	...	1
Dunstable	1	...	1	Nightingale	1	...	1
Duvernay	1	...	1	Ogden .....	...	1	1
Edmonton	44	21	65	Olds	1	2	3
Eaglesham	1	...	1	Onoway .....	...	1	1
East Coulee	1	...	1	Pakan	1	...	1
Edberg	1	...	1	Peavine	1	...	1
Edson .....	...	1	1	Pendant d'Oreille	1	...	1
Elmsworth	1	...	1	Penhold	1	...	1
Erskine .....	...	2	2	Phillips .....	...	1	1
Fairview .....	...	1	1	Pincher Creek	1	1	2
Falher	1	...	1	Plamondon	1	...	1
Falun	1	...	1	Pollockville	1	...	1
Fenn	1	...	1	Ponoka	1	1	2
Flagstaff .....	...	1	1	Prince Albert			
Forestburg	1	...	1	Penitentiary	1	...	1
Fort Saskatchewan	2	...	2	Prosperity	1	...	1
Frank	1	...	1	Provost .....	...	1	1
Freeman River	1	...	1	Raven	1	...	1
Gadsby	1	1	2	Redcliff	1	1	2
Genesee	1	...	1	Red Deer	1	1	2
Gleichen	4	...	4	Rocky Mountain House	3	...	3
Grande Prairie .....	...	1	1	Rosedale	2	...	2
Grassy Lake	1	...	1	Rosemary	1	...	1
Grimshaw	1	...	1	Roycroft	1	1	2
Hamlin	1	...	1	Ryley .....	...	1	1
Harmattan	1	...	1	Sarcee .....	...	1	1
Hay Lake .....	...	1	1	St. Paul	1	1	2
Hayter	1	...	1	Schuler	1	...	1
Heath Creek	1	...	1	Shandro	1	...	1
Herronton	1	...	1	Smoky Lake	1	...	1
High Prairie	1	...	1	Spedden .....	...	1	1
High River .....	...	2	2	Spirit River .....	...	1	1
Hines Creek	1	...	1	Spring Creek	1	...	1
Holborn	1	...	1	Stettler	2	2	4
Homeglen .....	...	1	1	Strathmore	1	...	1
Hughenden	1	...	1	Suffield .....	...	1	1
Innisfail	2	...	2	Sundre	2	...	2
Iron River	1	...	1	Sunset Prairie, B.C. ..	1	...	1
Iron Springs	2	...	2	Telfordville	1	...	1
Jarrow	1	...	1	Therien	1	...	1
Judah	1	...	1	Thorsby .....	...	1	1
Kayow	1	...	1	Turner Valley	1	...	1
Kitscoty	1	...	1	Vegreville	2	...	2
Lacombe	1	1	2	Viking	2	...	2
Lamont .....	...	1	1	Villeneuve	1	...	1
Larkspur	1	...	1	Vilna	2	...	2
Legal	1	...	1	Wainwright	1	...	1
Leighmore	1	...	1	Waskatenau	1	...	1
Leslieville	1	...	1	Walsh	1	...	1
Lethbridge	10	3	13	Waterways .....	...	1	1
Linaria .....	...	1	1	Waugh .....	...	1	1
Lochvale	1	...	1	Wayne .....	...	1	1
Macleod	2	1	3	Wetaskiwin	6	1	7
Magrath	1	...	1	Whitemud .....	...	1	1
Manyberries	1	...	1				
				Total.....	254	134	388

Provincial Mental Institute, Oliver

(W. J. McALISTER, M.D., *Acting Medical Superintendent*)

Following the resignation of Dr. Fitzpatrick in July, I was asked to take over as Acting Superintendent of the Institute and at the same time act in a supervisory capacity to Dr. McCullough in his work at Red Deer. Dr. Brearley, who was assistant physician at the Institute, when I came, resigned in October, his place being taken by Dr. Lefsrud, of the Ponoka staff. He also resigned about the end of the year, and Dr. Valens, who had been on the staff of the Ponoka Hospital earlier in the year, was taken on the strength in his place, and has continued as medical assistant ever since.

In October it was decided that the corridor connecting No. 1 unit with the service building should be completed. This was done, but it was not ready in time to permit us to open the new kitchen and dining rooms before February, 1932.

The movement of population, unfortunately, was extremely limited. This to be expected considering the chronic nature of the psychoses from which practically all of our patients suffer. A return to community life, no matter how desirable, is out of the question for most of them, for such return presupposes homes to go to and adequate supervision when they arrive there. The general health of the patients during the year was quite satisfactory. The mortality rate was extremely low, and confined altogether to patients of advanced years. Occupational therapy was continued throughout the year. We hope to be in a position to enlarge upon this work soon to the mutual advantage of both the patients and the Institute. Adequate dental attention was given by Dr. Heacock to all requiring dental work.

STATISTICAL TABLES

In preparing this report, we have given special attention to statistics dealing with the life history of our patients. This data, culled from various sources, is submitted for the help it should give in any attempt to more thoroughly understand the many factors which have a bearing on the incidence of mental disease, and to appreciate more fully the social and economic loss to the Province which mental disease entails.

Tables 7 and 7a are especially interesting, as they show that of our total population, 58% developed mental disease and were admitted to a mental hospital before they were 35 years of age. Of these 80% were Schizophrenics, or cases of Dementia Praecox. Schizophrenia is considered hereditary, and hence is closely allied to that other biogenic problem, primary mental defect. As the Schizophrenic forms the largest group in any mental hospital, and as the primary ament forms the largest group in any school for the feeble-minded, one is impressed by the need for constantly carrying

on the fight against the root cause of these two social and economic problems—defective stock and its propagation.

Table 9 would suggest that the isolation and other stresses associated with rural life are greater precipitating factors in the causation of mental breakdowns than any comparative conditions found in urban life. About 70% of our cases were admitted from a rural environment.

Economic dependency—fear of being in want—doubtless has a place too as a causative factor. Over 80% of our patients were more or less dependent on admission to the mental hospital. Table 16 shows the great preponderance of those following agricultural and manual pursuits in comparison with those from other walks of life, and is of interest especially if considered in conjunction with Tables 9 and 10.

TABLE No. 1
MOVEMENT OF INSANE POPULATION

Patients on Books Jan. 1st, 1931:			
(a) In Hospital	Males	Females	Total
(b) On Probation	317	.....	317
Total.....	317	.....	317
Admissions during Year:			
(a) First Admissions	11	.....	11
(b) Re-admissions	1	.....	1
(c) Transfers	1	.....	1
Total.....	13	.....	13
Total Received during Year:			
(a) Transfers	1	.....	1
(b) Re-admissions	1	.....	1
(c) By Warrant	4	.....	4
(d) By Voluntary Application	7	.....	7
Total.....	13	.....	13
Total on Books during Year	330	.....	330
Discharged during Year:			
(a) As Recovered .....	.....	.....	.....
(b) As Improved	6	.....	6
(c) As Unimproved	1	.....	1
(d) As without Psychoses	2	.....	2
(e) Transfers	1	.....	1
(f) Died during Year	4	.....	4
Total.....	14	.....	14
Patients on Books end of Year:			
(a) In Hospital	316	.....	316
(b) On Probation .....	.....	.....	.....
Total.....	316	.....	316
Total Admitted since Opening	473	.....	473
Total Discharged since Opening	104	.....	104
Total Died since Opening	53	.....	53

TABLE No. 2
NUMBER OF OFFICERS AND EMPLOYEES

Males Females Total			Males Females Total		
Medical Superintendent ..	1	.....	1	Teachers .....	.....
Medical Officer	1	.....	1	Occupational Therapy..	1
Dentist	1	.....	1	Kitchen and Bakery	3
Administrative Asst.	1	.....	1	Laundry	1
Bursar	1	.....	1	Gardeners & Assistants	4
Storekeeper	1	.....	1	Engineers & Mechanics	7
Stenographer .....	.....	1	1	Other Male Employees..	7
Night Supervisor	1	.....	1	Other Female Em-	.....
Graduate Nurses .....	.....	.....	.....	ployees .....	.....
Other Female Nurses .....	.....	.....	.....	Total.....	69
Male Attendants	39	.....	39		2
Social Workers .....	.....	.....	.....		71

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 3
PSYCHIATRIC AND INDUSTRIAL CLASSIFICATION OF PATIENTS

	Males	Females	Total
Patients Insane	299	.....	299
Epileptic (not insane)	17	.....	17
Mental Deficiency (not insane) .....	.....	.....	.....
Alcoholics (not insane) .....	.....	.....	.....
Drug Addicts (not insane) .....	.....	.....	.....
Neurosyphilitics (not insane) .....	.....	.....	.....
All Other Types .....	.....	.....	.....
Total Population.....	316	.....	316
Industrial Workers	19	.....	19
Garden Workers	48	.....	48
Internal Workers	211	.....	211
External Workers	16	.....	16
Doing No Work	22	.....	22
Total Population.....	316	.....	316

TABLE No. 4
NATIVITY OF PATIENTS IN RESIDENCE

	Males	Females	Total		Males	Females	Total
Canada	96	.....	96	Japan	2	.....	2
Australia	1	.....	1	Norway	16	.....	16
Austria	29	.....	29	Poland	1	.....	1
Belgium	1	.....	1	Roumania	4	.....	4
China	2	.....	2	Russia	14	.....	14
Denmark	4	.....	4	Scotland	12	.....	12
England	37	.....	37	Sweden	8	.....	8
Finland	3	.....	3	Switzerland	1	.....	1
France	2	.....	2	United States	36	.....	36
Germany	7	.....	7	Wales	3	.....	3
Holland	2	.....	2	Other Countries	9	.....	9
Hungary	1	.....	1	Unascertained	13	.....	13
Ireland	7	.....	7	Total.....	316	.....	316
Italy	5	.....	5				

TABLE No. 5
CITIZENSHIP OF PATIENTS IN RESIDENCE

	Males	Females	Total
Citizen by Birth	96	.....	96
Citizen Naturalization	17	.....	17
Aliens	136	.....	136
Unascertained	7	.....	7
British Birth Out-Canada	60	.....	60
Total.....	316	.....	316

TABLE No. 6
DENTAL REPORT

	Males	Females	Total
Patients Examined	288	.....	288
Patients Treated	75	.....	75
Prophylactic Treatments	68	.....	68
Fillings	34	.....	34
Extractions	35	.....	35
New Dentures	4	.....	4
Dentures Repaired	2	.....	2

TABLE No. 7
AGE AT ADMISSION AND PRINCIPAL PSYCHOSES

	Psychoses	Total		Under 15 yrs.		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	Traumatic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Senile	8	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Cerebral Arteriosclerosis	4	...	...	...	...	...	...	...	...	...	...	...	...	...
4	General Paralysis	8	...	...	...	...	...	1	...	1	...	1	...	1	...
5	With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	With Brain Tumour .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	With Other Brain Diseases	3	...	...	...	1	...	1	...	...	...	...	...	...	...
9	Alcoholic	2	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	With Pellagra .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	With other Somatic Diseases	1	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Manic-depressive	13	...	...	...	...	...	...	...	...	...	4	...	...	1
14	Involutional Melancholia	1	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Dementia Praecox	198	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Paranoia or Paranoid Conditions	44	...	1	...	8	...	42	...	54	...	44	...	24	...
17	Epileptic Psychoses	5	...	1	...	...	...	...	...	1	...	4	...	5	...
18	Psychoneuroses and Neuroses	1	...	...	...	...	...	1	...	...	...	1	...	2	...
19	With Psychopathic Personality	4	...	...	...	...	...	...	...	...	...	...	...	...	...
20	With Mental Deficiency	12	...	...	...	2	...	2	...	1	...	4	...	1	...
21	Undiagnosed Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Without Psychoses	12	...	...	...	1	...	1	...	3	...	2	...	3	...
Total.....		316	...	2	...	12	...	48	...	62	...	61	...	37	...

TABLE No. 7a
AGE AT ADMISSION AND PRINCIPAL PSYCHOSES

	40 to 44		45 to 49		50 to 54		55 to 59		60 to 64		65 to 69		70 & over		Unascertained	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Psychoses																
1 Traumatic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Senile .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Cerebral Arteriosclerosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 General Paralysis	2	2	2	2	...	...	...	...	1	2	...	...	...	...	...	...
5 Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Brain Tumour .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Other Brain Diseases .....	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
9 Alcoholic	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
10 Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 Pellagra .....	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
12 Somatic Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13 Manic-depressive	1	1	1	1	...	...	4	...	1	...	1	...	...	...	...	...
14 Involutional Melancholia .....	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
15 Dementia Praecox	11	11	7	7	2	2	...	...	...	...	...	...	...	...	5	5
16 Paranoia or Paranoid Conditions..	11	11	5	5	10	10	3	...	3	...	1	...	...	...	...	...
17 Epileptic	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18 Psychoneuroses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19 Psychopathic Personality .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20 Mental Deficiency	2	2	...	...	2	2	...	...	...	...	...	...	...	...	...	...
21 Undiagnosed .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22 Without Psychoses	1	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...
Total.....	30	...	16	...	19	...	9	...	7	...	4	...	3	...	6	...

TABLE No. 8
DEGREE OF EDUCATION OF FIRST ADMISSIONS WITH PRINCIPAL PSYCHOSES

	Psychoses	Total		Illiterate		Reads and Writes		Common School		High School		University		Unascertained	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	Traumatic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Senile	8	...	8	...	1	...	4	...	1	...	...	...	2	...
3	Cerebral Arteriosclerosis	4	...	4	...	1	...	1	...	1	...	...	...	1	...
4	General Paralysis	8	...	8	...	4	...	2	...	1	...	...	...	...	...
5	With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	With Brain Tumour .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	With other Brain Diseases	3	...	3	...	1	...	2	...	...	...	...	...	...	...
9	Alcoholic	2	...	2	...	1	...	...	...	...	...	...	...	1	...
10	Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	With Pellagra .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	With other Somatic Diseases	1	...	1	...	1	...	...	...	...	...	...	...	...	...
13	Manic-depressive	13	...	13	...	4	...	7	...	1	...	...	...	1	...
14	Involutional Melancholia	1	...	1	...	...	...	...	...	...	...	...	...	1	...
15	Dementia Praecox	198	...	15	...	92	...	56	...	7	...	1	...	27	...
16	Paranoia or Paranoid Conditions	44	...	3	...	19	...	13	...	2	...	...	...	7	...
17	Epileptic Psychoses	5	...	1	...	1	...	1	...	...	...	...	...	2	...
18	Psychoneuroses and Neuroses	1	...	1	...	1	...	...	...	...	...	...	...	...	...
19	With Psychopathic Personality	4	...	4	...	1	...	2	...	1	...	...	...	...	...
20	With Mental Deficiency	12	...	2	...	5	...	3	...	...	...	...	...	2	...
21	Undiagnosed Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Without Psychoses	12	...	3	...	5	...	1	...	...	...	...	...	3	...
Total.....		316	...	25	...	137	...	92	...	14	...	1	...	47	...

TABLE No. 9
ENVIRONMENT OF FIRST ADMISSIONS WITH PRINCIPAL PSYCHOSES

Psychoses	Total		Urban 2,500 and over				Rural		Unascertained	
	M.	F.	M.	F.	T.	T.	M.	F.	M.	T.
1 Traumatic .....	...	...	...	...	...	...	...	...	...	...
2 Senile	8	...	2	...	2	6	...	...	...	...
3 Cerebral Arteriosclerosis	4	...	2	...	2	2	...	...	...	...
4 General Paralysis	8	...	4	...	4	4	...	...	...	...
5 With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...
6 With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...
7 With Brain Tumour	3	...	1	...	1	1	...	...	1	...
8 With other Brain Diseases	2	...	2	...	2	...	...	...	...	...
9 Alcoholic .....	...	...	...	...	...	...	...	...	...	...
10 Due to Drugs .....	...	...	...	...	...	...	...	...	...	...
11 With Pellagra	1	...	...	...	...	1	...	...	...	...
12 With other Somatic Diseases	13	...	3	...	3	10	...	...	...	...
13 Manic-depressive	1	...	1	...	1	...	...	...	...	...
14 Involutional Melancholia	198	...	37	...	37	139	...	...	22	22
15 Dementia Praecox	44	...	9	...	9	33	...	...	2	2
16 Paranoia or Paranoid Conditions	5	...	2	...	2	2	...	...	1	1
17 Epileptic Psychoses	1	...	...	...	...	...	...	...	...	...
18 Psychoneuroses and Neuroses	4	...	3	...	3	1	...	...	...	...
19 With Psychopathic Personality	12	...	...	...	...	11	...	...	1	1
20 With Mental Deficiency	12	...	...	...	...	...	...	...	...	...
21 Undiagnosed Psychoses	12	...	3	...	3	6	...	...	3	3
22 Without Psychoses .....	...	...	...	...	...	...	...	...	...	...
Total.....	316	...	69	...	69	217	30	...	30	30

TABLE No. 10
ECONOMIC CONDITION OF FIRST ADMISSIONS WITH PRINCIPAL PSYCHOSES

Psychoses		Total			Dependent			Living on Daily Earnings			Comfortable, Ample for four Months			Unascertained		
		M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1	Traumatic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Senile	8	...	8	2	...	2	4	...	4	2	...	2	...	...	...
3	Cerebral Arteriosclerosis	4	...	4	...	...	...	...	...	...	4	...	4	...	...	...
4	General Paralysis	8	...	8	6	...	6	...	...	...	2	...	2	...	...	...
5	With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	With Brain Tumour	3	...	3	1	...	1	1	...	1	1	...	1	...	...	...
8	With other Brain Diseases	2	...	2	...	...	...	2	...	2	...	...	...	...	...	...
9	Alcoholic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	With Pellagra .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	With other Somatic Diseases	1	...	1	...	...	...	...	...	...	1	...	1	...	...	...
13	Manic-depressive	13	...	13	2	...	2	10	...	10	1	...	1	...	...	...
14	Involuntional Melancholia	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...
15	Dementia Praecox	198	...	198	39	...	39	139	...	139	5	...	5	...	15	15
16	Paranoia or Paranoid Conditions	44	...	44	6	...	6	35	...	35	8	...	8	...	...	...
17	Epileptic Psychoses	5	...	5	3	...	3	1	...	1	1	...	1	...	...	...
18	Psychoneuroses and Neuroses	1	...	1	...	...	...	1	...	1	...	...	...	...	...	...
19	With Psychopathic Personality	4	...	4	2	...	2	2	...	2	...	...	...	...	...	...
20	With Mental Deficiency	12	...	12	3	...	3	7	...	7	2	...	2	...	...	...
21	Undiagnosed Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Without Psychoses	12	...	12	10	...	10	1	...	1	1	...	1	...	...	...
Total.....		316	...	316	75	...	75	203	...	203	23	...	23	...	15	15

TABLE No. 11
USE OF ALCOHOL BY FIRST ADMISSIONS WITH PRINCIPAL PSYCHOSES

		Total.				Abstinent.		Temperature.		Inter-temperature.		Unascertained.		
		M.	F.	T.		M.	F.	T.	M.	F.	T.	M.	F.	T.
Psychoses														
1	Traumatic	8	...	8	...	1	...	1	...	5	...	2	...	2
2	Senile	4	...	4	...	...	...	...	...	2	...	1	...	1
3	Cerebral Arteriosclerosis	8	...	8	...	...	...	...	...	6	...	2	...	2
4	General Paralysis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
5	With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
6	With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...
7	With Brain Tumour	3	...	3	...	...	...	1	...	1	...	1	...	1
8	With other Brain Diseases	2	...	2	...	...	...	...	...	2	...	2	...	2
9	Alcoholic .....	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...
11	With Pellagra .....	...	...	...	...	...	...	...	...	1	...	1	...	...
12	With other Somatic Diseases	13	...	13	...	...	...	7	...	7	...	1	...	5
13	Manic-depressive	1	...	1	...	...	...	...	...	...	...	1	...	1
14	Involuntional Melancholia	198	...	198	...	15	...	15	...	121	...	11	...	51
15	Dementia Praecox	44	...	44	...	7	...	7	...	29	...	4	...	4
16	Paranoia or Paranoid Conditions	5	...	5	...	...	...	...	...	4	...	4	...	1
17	Epileptic Psychoses	1	...	1	...	...	...	...	...	1	...	...	...	1
18	Psychoneuroses and Neuroses	4	...	4	...	1	...	1	...	2	...	...	...	...
19	With Psychopathic Personality	12	...	12	...	1	...	1	...	7	...	1	...	3
20	With Mental Deficiency .....	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Undiagnosed Psychoses	12	...	12	...	4	...	4	...	6	...	...	...	2
22	Without Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.....		316	—	316	...	29	—	29	...	192	—	21	...	74

TABLE No. 12
MARITAL CONDITION OF FIRST ADMISSIONS WITH PRINCIPAL PSYCHOSES

Psychoses	Total.		Single.		Married.		Widowed.		Separated.		Divorced.		Unascertained.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Traumatic	8	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Senile	4	4	4	4	1	1	2	2	...	...	...	...	1	...
3 Cerebral Arteriosclerosis	4	4	1	1	2	1	1	1	...	...	...	...	...	...
4 General Paralysis	8	...	1	1	7	7	...	...	...	...	...	...	...	...
5 With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 With Brain Tumour	3	3	2	2	1	1	...	...	...	...	...	...	...	...
8 With other Brain Diseases	2	2	1	1	1	1	...	...	...	...	...	...	...	...
9 Alcoholic .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 With Pellagra	1	...	...	...	1	1	...	...	...	...	...	...	...	...
12 With other Somatic Diseases	13	13	5	5	5	5	2	2	...	...	...	1	...	1
13 Manic-depressive .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14 Involutional Melancholia	1	1	1	1	1	1	1	1	...	...	...	...	...	...
15 Dementia Praecox	198	198	163	163	24	24	1	1	...	...	2	2	8	8
16 Paranoia or Paranoid Conditions	44	44	26	26	16	16	...	...	...	...	2	2	...	...
17 Epileptic Psychoses	5	5	3	3	2	2	...	...	...	...	...	...	...	...
18 Psychoneuroses and Neuroses	1	1	1	1	...	...	...	...	...	...	...	...	...	...
19 With Psychopathic Personality	4	4	4	4	...	...	...	...	...	...	...	...	...	...
20 With Mental Deficiency	12	12	12	12	...	...	...	...	...	...	...	...	...	...
21 Undiagnosed Psychoses	12	12	11	11	1	1	...	...	...	...	...	...	...	...
22 Without Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	316	316	234	234	62	62	6	6	...	...	4	4	10	10

TABLE No. 13
DISCHARGE OF PATIENTS ACCORDING TO PRINCIPAL PSYCHOSES AND CONDITION ON DISCHARGE

Psychoses	Total			Recovered			Improved			Unimproved		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1 Traumatic .....	...	...	...	...	...	...	...	...	...	...	...	...
2 Senile .....	...	...	...	...	...	...	...	...	...	...	...	...
3 Cerebral Arteriosclerosis .....	...	...	...	...	...	...	...	...	...	...	...	...
4 General Paralysis .....	...	...	...	...	...	...	...	...	...	...	...	...
5 With Cerebral Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...
6 With Huntington's Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...
7 With Brain Tumour .....	...	...	2	...	...	2	...	...	2	...	...	...
8 With other Brain Diseases	2	...	...	...	...	...	...	...	...	...	...	...
9 Alcoholic .....	...	...	...	...	...	...	...	...	...	...	...	...
10 Due to Drugs .....	...	...	...	...	...	...	...	...	...	...	...	...
11 With Pellagra .....	...	...	...	...	...	...	...	...	...	...	...	...
12 With other Somatic Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...
13 Manic-depressive .....	...	...	...	...	...	...	...	...	...	...	...	...
14 Involutional Melancholia .....	...	...	3	...	...	...	...	...	1	...	2	2
15 Dementia Praecox	3	...	...	...	...	...	...	...	...	...	...	...
16 Paranoia or Paranoid Conditions .....	...	...	1	...	...	...	...	...	1	...	...	...
17 Epileptic Psychoses	1	...	3	...	...	...	...	...	2	...	1	1
18 Psychoneuroses and Neuroses	3	...	...	...	...	...	...	...	...	...	...	...
19 With Psychopathic Personality .....	...	...	...	...	...	...	...	...	...	...	...	...
20 With Mental Deficiency	1	...	1	...	...	...	...	...	...	1	...	1
21 Undiagnosed Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...
22 Without Psychoses .....	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	10	...	10	...	...	...	6	...	6	4	...	4

TABLE No. 14
CAUSES OF DEATH CLASSIFIED ACCORDING TO PRINCIPAL PSYCHOSES—AGE AT DEATH—DURATION OF HOSPITAL LIFE

Cause of Death	Total			Senile			Cerebral Arterio-sclerosis			Paranoia, Paranoid Cond.			Epileptic Psychoses			Age		Duration Hospital Life	
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	Yrs.	Mths.	Yrs.	Mths.
Chronic Myocarditis	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1	56	14	7	...
Acute Dilatation (Cardiac)	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	69	20	5	...
Cellulitis of Neck	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	60	15	8	...
Broncho-pneumonia	1	...	1	...	...	...	1	...	1	...	...	...	...	...	...	73	2	...	...
Total.....	4	...	4	1	...	1	1	...	1	...	1	...	1	...	1	...	...	...	...

TABLE No. 15
RELIGION OF PATIENTS IN RESIDENCE

	M.	F.	T.
Baptists	10	....	10
Congregationalists	30	....	30
Episcopalians	3	....	3
Jews	32	....	32
Presbyterians	89	....	89
Roman Catholics	21	....	21
United Church	96	....	96
Other Denominations	35	....	35
Unascertained			
Total.....	316	....	316

TABLE No. 16
OCCUPATION OF PATIENTS IN RESIDENCE
Occupation

Professional .....	....	....	....
Commercial	8	....	8
Agricultural and Pastoral	106	....	106
Mechanics at Outdoor Vocations	18	....	18
Mechanics, etc., at Sedentary Vocations.....	14	....	14
Domestic Service	3	....	3
Education and Higher Domestic Duties.....	1	....	1
Miners, Marine, Engineers, Railway Employees	15	....	15
Labourers	105	....	105
No Occupation	3	....	3
Unascertained	43	....	43
Total.....	316	....	316

Provincial Training School, Red Deer

(D. L. McCULLOUGH, M.D., *Acting Medical Superintendent*)

On the 31st of December, 1931, there were 190 patients in residence as against 180 at the 1st of January, 1931, an increase of 10 for the year. Table No. 1, which is appended, gives in detail the movement of the patients throughout the year with the sex distribution.

Twenty-five new applications for admission were received, 9 male and 16 female. This brings the total number of cases awaiting admission to 182 (Table 2) or, if allowance is made for the 7 cases whose present whereabouts we do not know, there are in all 175 cases seeking admission. Many of these are of a most pitiable and urgent nature. Ninety are males and 85 females.

In addition to these 25 cases definitely applying for admission, a further 27 cases of mental deficiency were reported to the Training School by various agencies. Table 3 shows that the total number of suspects reported since 1923 is now 533, 304 males and 229 females.

The present status of the feeble-minded problem throughout the Province, as known to us, is given in Table 4. Disregarding the 43 cases discharged or paroled from the Provincial Training School between the years 1923-31, there were at the end of the year 240 patients resident in the institutions at Red Deer, Ponoka and Oliver, 182 awaiting admission to Red Deer and 533 suspects reported, giving a total of 955, 715 of whom are extra-institutional. As many of the latter are a grievous burden on the families to which they belong, the need for further institutional accommodation is evident.

INSTITUTIONAL PROGRESS.

The year just ended has been one of consistently steady progress. Early in August Dr. W. J. McAlister, for eight years Medical Superintendent of the Training School, was transferred to Oliver, and his place taken by Dr. D. L. McCullough, for ten years Assistant Medical Superintendent at Ponoka. The suite of rooms in the main building vacated by Dr. McAlister was remodelled to accommodate the matron and some members of the female staff formerly located on the second floor. This in turn released accommodation for 12 more patients, and with a few minor alterations effected on the third floor, will bring our total accommodation to 200 beds. Some of the new beds were already occupied at the end of the year.

Although this was the only structural change of any consequence and no new construction was undertaken, much work was done by the various mechanical and outside staffs in maintaining and improving the physical efficiency of the buildings and plant.

Early in the year the installation of the electric refrigerators in the kitchen was completed, and they have since given good service.

In the fall another fire hydrant was set up to the north of the main building, giving prompt and easy access to a side of the building hitherto reached only with difficulty and the loss of valuable time had a fire occurred.

A pipe system was laid to supply the gardens and grounds with water, thus meeting a long felt need.

A water softener was installed in the power house and went into service on the 1st of January, 1932. This should do much to reduce laundry costs and increase the life of linens, woollens and other laundered articles.

The gardens and grounds were also well maintained, the work, along with the farm work, providing a splendid outlet for the activities of the larger boys. The crop of vegetables realized was one of the best for some years.

HEALTH OF PATIENTS.

The health of the patients, as a whole, was very good, though one case of typhoid (in a previously immunized patient) and two cases of scarlet fever occurred early in the year and 10 cases of whooping cough in the fall. There were 5 deaths. Reference to Tables 15 and 16 show that the deaths were due to such diverse conditions as lobar pneumonia, septicaemia, erysipelas and status epilepticus (two cases), conditions which could not in themselves be taken as indicating a general state of low health on the part of the children.

As in other years, we have sought to maintain the health of the patients as a whole by providing a wholesome, well-balanced diet, insisting on absolute cleanliness of the patients and their surroundings, providing work for those mentally and physically capable of working, with recreation and play for all. In addition to these general measures for promoting health, specific measures used were the prophylactic inoculation of 235 patients against scarlet fever and 55 cases against smallpox, together with a number of inoculations against diphtheria in the newly admitted patients. Typhoid inoculation was not resorted to, as all patients and staff had been immunized in the fall of 1930.

PATIENTS' ACTIVITIES.

Close supervision was kept over the various activities of the patients in the gymnasium and playgrounds, in the sense training, academic and vocational classes as well as in the various Departments where patients are employed, such as the sewing room, laundry, dining rooms, pantry, kitchen, infirmary, gardens, grounds and farm.

Outdoor games and exercise in the summer, skating and indoor games in the winter were again encouraged.

During August and September several groups of boys or girls, thirteen or fourteen at a time, went for a week each to the camp at Sylvan Lake. The children thoroughly enjoyed the camping and bathing as a relief from the year-long routine of institutional life, were greatly benefited in health. Some, also, were benefited in disposition and temperament. Altogether some 70 children attended camp.

Two of the staff have got together an enthusiastic group of girl guides. The matron and registered nurse have given the high grade girls some simple instruction in elementary nursing and first aid. A number of Sunday school classes are now being regularly held for both boys and girls.

In these latter activities the performance of the children cannot be compared with that of normal children, nor can comparable results be expected, but good work is undoubtedly being done in the way of enhancing their personalities, exteriorizing their interests, substituting healthful activities of body and wholesome attitudes of mind for harmful, as well as increasing their happiness. I appreciate the help of the staff, who without exception have throughout the year, in this as in other matters, been loyal, helpful and willing to give voluntarily their time and services to the ideals of the school.

Educational activities were fully maintained, larger groups having been taken for instruction by the teacher, sense trainer and playground supervisor. Occupational activities were extended not only to a larger number of girls, but to a group of small boys for an hour each afternoon during the winter months, thus giving them a change of surroundings from the wards and a welcome and wholesome outlet for their energies.

The samples of occupational work displayed at the Edmonton exhibition and the Red Deer fair as a part of the public health exhibit drew very favourable comments, found a ready sale, and did much to enlarge the knowledge of the public concerning the activities of the school and the Department.

A successful sports day was held early in July. A number of patients' dances were held during the winter months. At Christmas a number of the smaller children, under the tuition of the sense training teacher, put on a highly creditable concert.

Throughout the year a number of fire drills were held, either sectional practices or general alarms, as the weather permitted.

STAFF.

Fewer changes have occurred in the personnel of the staff than usual.

Except for two cases of scarlet fever, the health of the staff has been, on the whole, good.

In November, Miss G. T. Dahlback, matron, was replaced by Miss E. M. Holmes, R.N., and Miss L. A. Hibbard, R.N., by Miss E. M. Carnochan, R.N.

In October a branch of the Civil Service Association was formed, and it is hoped will be active in developing the social side of the staff life.

EUGENICS BOARD.

The Eugenics Board met at the Provincial Training School February 12th, 1931, considered and approved of the sterilization of 4 cases, on June 4th approved of 7 cases, and on December 17th considered 4 cases and approved of 3. Table 14 shows that to date 31 cases have been presented to the Board, and 30 approved of for operation. Only 25 have been sterilized, the parents having in some

cases withheld their consent. Nine have been paroled and none, as yet, returned to the Provincial Training School.

DENTAL WORK.

Dr. Heacock visited the Training School twice during the year and made a thorough survey of all patients, doing the necessary extractions, fillings and much prophylactic work. This is a most valuable contribution to the health of the patients.

SOCIAL SERVICE WORK.

In June Mr. Jaffary's place was taken by Mr. Kibblewhite, who has called in at intervals, investigated a number of cases and sent us field reports.

DIETETICS.

Mr. Kolb, at the instance of the Department, paid a number of visits in an advisory capacity, investigating our dietary and making numerous suggestions.

VISITORS.

Visits were received during the year from Dr. M. R. Bow, Deputy Minister of Health, Dr. C. A. Baragar, Commissioner of Mental Institutions, and Dr. W. J. McAlister in a business and advisory capacity. These visits are always welcomed and appreciated; the visits of Dr. McAlister being especially valuable on account of his peculiarly intimate knowledge of every phase of the Training School life and organization. Early in November, Dr. H. B. Spaulding, Ph.D., Director of the Division of Statistics and Legislation for the Canadian National Committee for Mental Hygiene, paid a visit. On a number of occasions Mr. D. E. McDonald, Superintendent of Buildings, Department of Public Works, called on business. Through long association with the Training School he understands our problems and needs, and his willing co-operation and readiness to help are greatly appreciated.

TABLE No. 1
MOVEMENT OF PATIENTS IN 1931

	M.	F.	T.		M.	F.	T.
Number in residence at Dec. 31, 1930	95	85	180	Discharges, etc., during 1931:			
Admissions during 1931:				Paroled	3	3	6
Voluntary admissions	11	10	21	Discharges	2	2	2
Re-admissions	1	1	2	Transfers	2	2	2
Transfers	2	2	2	Deceased	2	3	5
	107	98	205	Number in residence at Dec. 31, 1931	102	88	190

TABLE No. 2
APPLICATIONS RECEIVED YEARLY BUT PATIENTS NOT ADMITTED

	M.	F.	T.
Applications received prior to 1923	13	13	26
Applications received during 1923	8	3	11
Applications received during 1924	10	8	18
Applications received during 1925	3	3	3
Applications received during 1926	8	10	18
Applications received during 1927	4	5	9
Applications received during 1928	7	4	11
Applications received during 1929	14	9	23
Applications received during 1930	17	14	31
Applications received during 1931	9	16	25
Total number of cases not admitted	90	85	175
Present whereabouts unknown	4	3	7
Total number of cases awaiting admission	94	88	182

TABLE No. 3
SUSPECTS REPORTED

	M.	F.	T.
Cases reported prior to 1923	107	56	163
Cases reported during 1923	28	33	61
Cases reported during 1924	20	12	32
Cases reported during 1925	17	14	31
Cases reported during 1926	30	21	51
Cases reported during 1927	12	17	29
Cases reported during 1928	18	18	36
Cases reported during 1929	29	28	57
Cases reported during 1930	24	22	46
Cases reported during 1931	19	8	27
Totals	304	229	533

The present whereabouts of many of these cases is unknown to us, particularly cases reported prior to 1923.

TABLE No. 4
SUMMARY OF MENTAL DEFECTIVES IN THE PROVINCE

	M.	F.	T.
Mental Defectives resident at Red Deer	102	88	190
Discharges, paroles, etc. (1923-1931)	27	16	43
Awaiting admission (Table 2)	94	88	182
Suspects reported (Table 3)	304	229	533
Mental Defectives, not insane, resident at Ponoka	19	19	38
Mental Defectives, not insane, resident at Oliver .....	....	....	12
Cases reported, sex unascertained .....	....	....	6
Totals	546	440	1,004

TABLE No. 5

(a) CHRONOLOGICAL AGES OF NEW ADMISSIONS

	M.	F.	T.		M.	F.	T.
From 1 to 4 years .....	....	1	1	From 25 to 29 years .....	....	1	1
From 5 to 9 years	1	2	3	From 30 to 34 years	1	....	1
From 10 to 14 years	8	2	10	From 35 upwards .....	....	....	....
From 15 to 19 years	2	6	8	Totals	12	13	25
From 20 to 24 years .....	....	1	1				

(b) CHRONOLOGICAL AGES OF OUTGOING PATIENTS

	M.	F.	T.		M.	F.	T.
From 5 to 9 years .....	....	1	1	From 25 to 29 years .....	....	1	1
From 10 to 14 years	2	3	5	From 35 upwards .....	....	1	1
From 15 to 19 years	3	2	5	Totals	5	10	15
From 20 to 24 years .....	....	2	2				

(c) CHRONOLOGICAL AGES OF TOTAL POPULATION

	M.	F.	T.		M.	F.	T.
From 1 to 4 years .....	....	1	1	From 25 to 29 years	8	15	23
From 5 to 9 years	5	6	11	From 30 to 34 years	5	4	9
From 10 to 14 years	30	19	49	From 35 upwards	4	3	7
From 15 to 19 years	31	22	53	Totals	102	88	190
From 20 to 24 years	19	18	37				

TABLE No. 6

BIRTHPLACES

	Resident Patients	Mother	Father
Alberta	129	9	....
Other Provinces	30	50	60
England	8	31	30
Ireland .....	....	4	4
Scotland .....	....	11	4
United States	13	28	29
Slavic	3	25	25
Others	1	11	13
Unknown	6	21	25

TABLE No. 7

RELIGION

Roman Catholics	36
Greek Catholics	14
Protestants	118
Mormons	3
Unknown	19

TABLE No. 8

ENVIRONMENT

Urban	72	Rural	118
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TABLE No. 9

ECONOMIC STATUS OF HOMES

Comfortable	51	Dependent	51
Marginal	79	Unknown	9

TABLE No. 10
RESPONSIBILITY FOR MAINTENANCE

Wards of the Province	26
Wards of the Municipal District	135
Wards of the Department of Child Welfare.....	1
Wards of the Department of Municipal Affairs	18
Wards of the Department of Pensions & National Health, Ottawa.....	2
Private Cases	4
Wards of the Dominion Government	1
Responsibility not established	3

TABLE No. 11
MENTAL STATUS

Classification	Number Present.	Percentage.
Idiot	73	38.42
Imbecile	82	43.16
Moron	35	18.42
M.D. and Psychotic	3	1.58
M.D. and Psychopathic	4	2.10
M.D. and Epileptic	42	22.10
Mongolian	12	6.32

TABLE No. 12
ANTECEDENT HEREDITY OF PATIENTS IN RESIDENCE

Epilpetic	12	Alcoholism	18
Psychotic	22	Syphilis	7
Mental Defective	80	T.B.C.	15
Neuropathic	25	Deafness	4
Psychopathic	1	Mutism	1

TABLE No. 13
INFIRMARY TYPE OF PATIENT

Idiot.			Imbecile.			Grand Total.	Percent.
Male.	Female.	Total.	Male.	Female.	Total.		
20	13	33	7	4	11	44	23.16

TABLE No. 14
CASES STERILIZED

	M.	F.	T.
Number of cases presented to Board	9	22	31
Number of cases approved by Board	9	21	30
Number of cases operated on	5	20	25
Cases sterilized prior to admission .....	...	5	5
Sterilized cases, paroled	2	7	9
Number of cases re-admitted .....	...	...	...
Sterilized cases in residence	3	18	21

TABLE No. 15
DISCHARGES, 1931

	Deported.	Trans-ferred.	Re-paroled.	Re-admitted.	Deaths.	Dis-charges.
Idiot	1	...
Imbecile	2	2	2	2
Moron	4	...	...	...
M.D. and Psychopathic	2	...	...	...	...
M.D. and Epileptic	2	...

TABLE No. 16
CAUSES OF DEATH

	M.	F.	T.
Lobar Pneumonia .....	...	1	1
Septicaemia .....	...	1	1
Erysipelas .....	...	1	1
Status Epilepticus	2	...	2
Totals.....	2	3	5

Central Alberta Sanatorium, Calgary

(A. H. BAKER, M.D., *Medical Superintendent*)

Owing to the prevailing economic conditions it has not been found possible to extend anti-tuberculosis work to any great extent. The Sanatorium services, however, have not been curtailed, and a larger number of clinical examinations have been conducted than in previous years. It has been possible to materially reduce the per diem cost of treatment, which includes not only the actual cost of treating patients in this institution, but also the cost of all tuberculosis clinic services assumed by the Department of Public Health.

THE CLINIC WORK.

The clinic work has proceeded along the usual lines, the bi-monthly clinic in Edmonton and the weekly ones at the Sanatorium and in Calgary being well patronized. All told, 135 new cases of tuberculosis were diagnosed in this department.

Medicine Hat Clinic.

In June a five-day clinic was conducted by two Sanatorium physicians. The Christmas Seal Sale Committee provided the funds for X-ray examinations and also the services of a nurse to assist the resident Public Health Nurse. The doctors in the city and the surrounding country were asked to refer all suspected cases and all known contacts. One hundred and eighty-five persons were examined and X-rayed, and of these 17 definite cases of tuberculosis were found and 36 were considered more or less suspicious. Since then some of the latter have been proven to be tuberculous, while the majority have remained well. It is felt that a reasonably complete check-up was made of the Medicine Hat district, and has made possible subsequent supervision.

Survey Blood Indian Reserve, Cardston.

Two Sanatorium physicians again conducted a five-day clinic. The Department of Indian Affairs assisted with the X-ray services and the officials of the St. Mary's and St. Paul's Schools gave hearty co-operation. Some 234 persons were examined, and most of these had X-ray films made. Nine cases of definite tuberculosis were found and 31 were considered suspicious. It was gratifying to note the improvement shown by some of those considered suspicious in the 1930 survey, who had received particular care from those in charge. The importance to the Province of paying careful attention to the tuberculosis situation on the Indian Reserves cannot be over-emphasized if sources of infection are to be controlled.

Travelling Diagnostician.

Clinics were held in other places, and an effort was made to get in touch with as many practising physicians as possible. A detailed statement of this work is given in the statistical section.

Sanatorium.

The total patient days exceeded those of 1930 by 274. The average patient strength was 204, which is about a maximum on the basis of a 210-bed establishment. As in previous years, approximately 75% of the treatment was of hospital type.

During the year 407 patients received institutional treatment. Of the 203 patients admitted during the year, 102, or 50%, had a positive sputum, namely, tubercle bacilli in the sputum, on admission, 10 developed positive sputum during treatment, while 91 remained negative.

Results of Treatment.

The results of treatment, as in previous years, have varied with the stage of the disease.; 100% of those diagnosed as minimal or moderately advanced on admission and who remained for more than 31 days in the institution, were discharged as benefited. Approximately 50% of the far advanced were improved. Of all pulmonary tuberculosis cases who were treated more than 31 days and discharged during the year, 73% were improved during their stay in the institution, while 27% failed in health or died. Consideration of these figures once more emphasizes the fact that the less advanced the disease when treatment is started, the greater the possibility of recovery or improvement. It is then important both in the interest of the individual patient and of the community at large, that the disease be discovered in as early a stage as possible, and that unnecessary delay be avoided in starting treatment.

Length of Treatment.

It is apparent that a number of patients are being kept in the Sanatorium long past any period of improvement; in other words, Sanatorium beds are being occupied by patients in whom no further improvement is to be expected. The effectiveness of the institution as an active treatment hospital is being diminished because a proportion of its beds are being occupied by patients who might suitably be taken care of elsewhere if satisfactory provision was made.

LENGTH OF TREATMENT OF PATIENTS DISCHARGED IN 1931.

	Days.				
	31 or under	From 32 to 180	From 181 to 365	From 365 to 730	Over 2 Years.
Number of patients	25	72	42	40	22
Average days	17	106	264	509	1,317

Accommodation.

No building or increased accommodation has been provided this year. The same need of sanatorium beds in this Province exists as in former years, and at the earliest possible moment beds should be provided. At present the waiting list makes necessary a delay of some months in the admission of a patient for treatment. The diagnostic services rendered, as well as those of the general medical profession, bring to light year by year a certain number of tuberculosis patients, but it is impossible in many cases to get them under any sort of treatment for months. The period of total incapacity is thereby increased and the possibility of recovery diminished.

Laboratory.

A full-time technician is employed. The number of examinations has shown a slight increase, and now numbers between 6,000

and 7,000 a year. The laboratory serves the public to the extent that sputum is examined free, and reports are made to the sender or physician.

Dental Department.

This work continues to be efficiently carried on by Dr. A. E. Heacock, Provincial Dentist. There were 593 patients examined, and 437 received treatment.

X-Ray Department.

The usual volume of work has been handled. New developments in X-ray technique have resulted in more and more reliance being placed on this type of examination, not only in the diagnosis of chest diseases, but also as a guide to treatment indicated for the specific type of disease present. X-ray examination affords us our most accurate estimation as to when tuberculosis is cured or the patient fit for discharge.

Nursing Branch.

The nursing staff consists of graduate nurses, and throughout the year no alterations have been made in the establishment. The work has been satisfactorily carried on during the year. It is gratifying to be able to report fewer changes in the personnel, and consequently a greater continuity of efficient service has been possible.

Dietary Department.

As is well known, nutrition plays a prominent part in the treatment of pulmonary tuberculosis, and throughout the year the dietary department has co-operated splendidly in maintaining a satisfactory standard. During the year the total number of meals served was 318,524, and the average cost of purchasing the food was 14.7 cents per person per meal.

Business Department.

While it is true that collections have fallen somewhat this year, it is also true that the cost of commodities has been much less, and by careful attention to detail the administration branch has been able to materially reduce the per diem cost of treatment.

Religious services have been held during the year, and have been most acceptable to patients and staff. We are indebted to Rev. Father MacDonald, the Very Reverend Dean Robinson, Rev. Captain Muncaster and Rev. Mr. Aldridge.

The Sanatorium has been the recipient of many gifts and services. Organizations and individuals have been most generous in providing entertainment and instruction, and gifts of various kinds. A list of our benefactors is to be found in the subsequent section. Grateful acknowledgement is made of the interest of our friends in this institution.

CLASSIFICATION OF DISCHARGED PATIENTS, 1931

On Admission.				Residence.		On Discharge.						
		No.	Total. %	T.B. %	Not over 31 days.	Over 31 days.	A.	AA.	Q.	I.	U.	D.
I.	No Disease	9	.....	.....	4	5	.....	.....	.....	.....	.....	.....
II.	Undiagnosed	6	.....	.....	2	4	.....	.....	.....	.....	.....	.....
III.	Non-T.B.	26	.....	.....	4	22	.....	.....	.....	.....	.....	3
IV.	T.B. inactive	8	.....	.....	2	6	.....	.....	.....	.....	.....	.....
Total		49	24.4	....	12	37	....	....	....	....	....	3
V. T.B. Pulmonary—												
1. Clinical (no bacilli found):												
Minimal	A.....	26	....	....	1	25	....	4	13	6	2	....
	B.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
	C.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Mod. Adv.	A.....	20	....	....	2	18	....	1	8	6	3	....
	B.....	3	....	....	1	2	....	.....	.....	2	.....	.....
	C.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Far. Adv.	A.....	4	....	....	.....	4	.....	.....	2	2	.....	.....
	B.....	3	....	....	.....	3	.....	.....	.....	3	.....	.....
	C.....	1	....	....	.....	1	.....	.....	1	.....	.....	.....
Total		57	28.4	37.5	4	53	....	5	26	17	5	....
2. Positive (bacilli found):												
Minimal	A.....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
	B.....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
	C.....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Mod. Adv.	A.....	15	....	....	.....	15	....	1	8	6	.....	.....
	B.....	3	....	....	.....	3	.....	.....	.....	3	.....	.....
	C.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Far Adv.	A.....	16	....	....	.....	16	.....	.....	2	9	2	3
	B.....	23	....	....	.....	23	.....	.....	4	5	6	8
	C.....	22	....	....	.....	21	.....	.....	1	5	3	13
App. Hopeless	9	....	....	....	7	2	.....	.....	.....	.....	.....	9
Total		88	43.8	57.9	8	80	....	1	15	28	11	33
Total Pul. T.B. Active		145	72.2	....	12	133	....	6	41	45	16	33
VI. T.B. Non-Pulmonary												
		7	3.4	4.6	1	6	....	....	3	3	....	....
Grand Total.....		201	....	....	25	176	....	6	44	48	16	36

Explanation of Abbreviations and terms used: The standard of classification is that of the National Tuberculosis Association. Minimal, moderately advanced and far advanced refer to anatomical extent of disease, while "A", "B", and "C" signify symptoms in order of increasing severity. "A" Arrested, "A.A." Apparently Arrested, "Q" Quiescent, "I" Improved, "U" Unimproved, and "D" Died.

N.B.—Only those in residence over 31 days are classed as treated.

TOTAL NUMBER OF PATIENT DAYS

D.P. and N.H.	4,757
Civilian	69,971
	74,728

INFIRMARY DAYS

D.P. and N.H.	3,469
Civilian	53,617
	57,086

	Military.	Civilian.	Total.
Patients in Sanatorium Jan. 1, 1931	12	192	204
Patients treated during 1931	26	381	407
Remaining in Sanatorium Jan. 1, 1932.....	8	198	206

CLASSIFICATION ON ADMISSION OF 201 DISCHARGED PATIENTS

No Disease	9	Tuberculosis, Pulmonary (Active).....	145
Undiagnosed	6	Tuberculosis, Non-Pulmonary	7
Non-Tuberculous	26		
Tuberculosis, Inactive	8		201

CLASSIFICATION OF 133 "TREATED CASES" OF ACTIVE PULMONARY TUBERCULOSIS

On Admission.		On Discharge.		
		Benefited.	Non-Benefited.	Died.
Minimal	25	25	...	...
Moderately Advanced	38	38	...	...
Far Advanced	68	34	11	23
Apparently Hopeless	2	...	...	2
	133	97	11	25

DIAGNOSIS OF NON-TUBERCULOUS CASES

Arthritis and Bronchiectasis	1	Nephritis	1
Abdominal Carcinomatosis	1	Pleurisy	2
Lung Abscess	3	Pneumonitis	1
Empyema-Pleural	1	Rheumatic Infection	1
Bronchiectasis	2	Upper Respiratory Infection	3
Bronchitis	1	Septic Tonsils	1
Debility	2	Pulmonary Fibrosis	2
Oral Sepsis	1	Migraine	1
Pneumonoconiosis	1		
Pyrexia	1		26

DEPARTMENT OF PUBLIC HEALTH

LABORATORY REPORT

Sputum Examinations:		Spinal Fluid	20
In Patients	2,746	Pleural Fluid	130
Out Patients	101	Guinea Pig Inoculation	40
Staff	5	Guinea Pig Autopsies	37
	2,852	Faeces	2
Other Examinations:		Other Examinations	68
Urinalysis (Routine and Special)	2,209		
Blood	867		6,225
Number of patients admitted during 1931			203
Number with sputum positive on admission			102
Number developing positive sputum here			10
Number with sputum persistently negative			89
Number not examined			2
			203

SUMMARY OF DENTAL WORK DONE

Patients Examined	593	Extractions	169
Patients Treated	437	Plates	16
Prophylaxis	152	Repairs to Plates	6
Fillings	224		

X-RAY REPORT

Radiographic:		Dental	70
Chest	764	Kidney	1
Gastro-Intestinal	37	Gall Bladder	2
Spine	27		947
Hips and Pelvis	9	Fluoroscopic:	
Knee	9	Chest, Gas Cases	1,601
Ankle	3	Others	302
Leg	2	Lipiodol Study	3
Shoulder	1		1,906
Hand	6	Barium Series	27
Head	16	Barium Enema	6

REPORT OF CLINICS HELD

	No. of Clinics.	Ex-Pts. Exam.	New T.B. Cases.	Suspects.	Total Exam.
Calgary Clinic	47	...	18	28	265
Edmonton Clinic	22	99	26	47	326
Medicine Hat	1	12	17	36	185
Sanatorium	50	38	26	20	224
Throughout Province	34	19	39	35	339
Indian School, Cardston	1	...	9	31	234
Staff at Sanatorium .....	...	...	...	...	35
	...	...	135	197	1,608

HELIO THERAPY REPORT

	Men.	Women.	Total.
Lamp Treatments:			
Under treatment Jan. 1, 1931	19	12	31
Began treatment during year	18	20	38
Discontinued treatment during year	18	22	40
Under treatment Jan. 1, 1932	19	10	29
Total number treated during year	37	32	69
Total number of treatments	3,438	2,650	6,088
Sun Baths:			
Number treated	6	22	28
Number treatments, 1,662. Time, 1,660 ½ hours.			
Air Baths:			
Number treated	7	56	63
Number treatments, 7,892. Time, 8825 ½ hours.			
Solar Laryngoscopic Treatments:			
Number treated	10	12	22
Number treatments, 2,832. Time, 238 ½ hours.			

SUMMARY OF OPERATING ROOM WORK

Pneumothorax:	
Number under treatment Jan. 1, 1931	42
Number new cases begun in 1931	31
Number old cases recommenced in 1931	1
Number cases terminated in 1931	33
Number cases under treatment Dec. 31, 1931	41
Number unsuccessful cases in 1931	13
Pneumothorax refills	1,637
Initial Pneumothorax cases (Successful)	31
Initial Pneumothorax cases (Unsuccessful)	13
Aspiration of Fluid from Pleural Cavity (15 patients)	84
" " Air from Pleural Cavity (9 patients)	19
" " Fluid from Pleural Cavity, air refill (2'')	9
" " Fluid from Pleural Cavity, oxygen refill (4'')	16
" " Fluid from Pleural Cavity, Gomenol refill (8'')	60
Other Aspirations	32
Irrigation of pleural cavity (1 patient)	2
Gomenol Injections into pleural cavity (4 patients)	17

Intravenous Injections of CaCl ₂	196
" " " Glucose	4
" " " Neosalversan	8
" " " Saline	1
Interstitial of Glucose Sol. (1 patient)	1
Intramuscular Injection of Bismuth (1 patient)	11
Rib Resections	2
Phrenic Avulsion	6
Intratracheal Injection of Lipiodol	5
Lumbar Punctures (5 patients)	23
Bladder Lavages (1 patient)	33
Plaster of Paris Splint to Arm	1
Plaster of Paris Cast to Leg (2 patients)	3
Plaster of Paris Splint to Hand	1
Basal Metabolism Tests (14 patients)	29
Examinations and Dressings	24

CLASSIFICATION OF PATIENTS DISCHARGED IN 1931

I.—SEX:

Male	94
Female	107
Total	201

II.—SOCIAL:

Married	88
Single	105
Widows	3
Widowers	5
Total	201

III.—AGES:

5 to 9 years of age	3	40 to 49 years of age	22
10 to 14 years of age	7	50 to 59 years of age	6
15 to 19 years of age	28	60 to 69 years of age	3
20 to 29 years of age	71	Total	201
30 to 39 years of age	61		

IV.—RELIGION:

Adventist	1	Pentecostal	1
Baptist	10	Presbyterian	23
Church of Christ	1	Roman Catholic	39
Church of England	42	Salvation Army	1
Greek Catholic	9	United	42
Greek Orthodox	5	Undenominational	6
Hebrew	1	Not known	2
Mormon	1	Total	201
Lutheran	17		

V.—OCCUPATIONS (Women):

Cashier	2	Stenographer	7
Clerk	3	Teacher	4
Housewife	47	No occupation	6
Working at Home	5	Laundress	2
Maid	8	Hairdresser	1
Nurse	5	Total	107
Nurse-in-Training	3		
Student	14		

VI.—OCCUPATIONS (Men):

Blacksmith	1	Merchant	1
Bookkeeper	1	Miner	3
Butcher	1	Manager	2
Car Repairer	1	Mail Carrier	1
Caretaker	1	Painter	1
Carpenter	2	Physician	1
Clerk	8	Policeman	1
Cooper	1	Printer	1
Driver	2	Steamfitter	1
Engineer	1	Student	6
Farmer	26	Salesman	3
Fisherman	1	Trainman	1
Fox Farmer	1	Trapper	1
Furrier	1	Tinsmith	1
Gardener	1	Upholsterer	1
Grain Buyer	1	Warehouseman	2
Hotel Proprietor	1	Weed Inspector	1
Linesman	1	Total	94
Labourer	11		
Mechanic	3		

VII.—NATIVITY:

Alberta	53	Lapland	1
Canada	43	Norway	4
Austria	4	Poland	5
Belgium	2	Russia	6
China	1	Roumania	1
England	24	Scotland	14
Galicia	1	Sweden	2
Holland	1	Switzerland	1
India	1	United States	22
Ireland	4	Ukraine	3
Italy	1	Wales	5
Jugo-Slavia	1	Total	201
Japan	1		

VIII.—LENGTH OF RESIDENCE IN ALBERTA:

Under 1 year	5	24 to 30 years	11
1 to 2 years	13	Over 30 years	3
3 to 5 years	22	Born in Alberta	53
5 to 9 years	19	Not known	1
10 to 14 years	17		
15 to 19 years	38	Total	201
20 to 24 years	19		

IX.—RACIAL ORIGIN:

Armenian	1	Japanese	1
Austrian	6	Laplander	1
Belgian	2	Norwegian	6
Breed	2	Polish	5
Chinese	1	Portugese	1
Danish	1	Russian	8
Dutch	2	Slavic	2
English	56	Swiss	2
Finnish	2	Swedish	6
French	9	Scotch	30
German	9	Ukrainian	12
Hungarian	1	Welsh	5
Irish	26	Not known	1
Indian	2		
Italian	1	Total	201

RESIDENCE OF DISCHARGED PATIENTS, 1931

CITIES:

Calgary	44	Medicine Hat	10
Edmonton	42	Red Deer	1
Drumheller	3	Wetaskiwin	1
Lethbridge	3		

TOWNS:

Beverly	2	Ponoka	1
Camrose	1	St. Albert	1
Claresholm	2	Vegreville	2
Gleichen	1	Daysland	1
Hanna	1	Edson	1
Innisfail	1		

VILLAGES:

Bawlf	1	Oyen	1
Burdett	1	Provost	2
Coalhurst	1	Willingdon	2
Champion	1	Rocky Mountain House	2
Lamont	1	Blood Indian Reserve	2
Newcastle	1	Transients	3

LOCAL IMPROVEMENT DISTRICTS:

No. 67	1	No. 251	2
No. 71	1	No. 434	1
No. 97	1	No. 733	1
No. 155	1	No. 826	1
No. 156	1	No. 888	1
No. 212	2	No. 947	1
No. 247	3	No. 1113	1

MUNICIPAL DISTRICTS:

No. 37, Sugar City	1	No. 458, Montgomery	1
No. 39, Kerr	2	No. 482, Vermilion Valley	1
No. 70, Livingstone	3	No. 487, Cornhill	2
No. 99, Argyle	1	No. 515, Norma	1
No. 158, Royal	2	No. 517, Clover Bar	1
No. 191, Stockland	1	No. 518, Stratheona	1
No. 245, Lonebutte	1	No. 520, Inga	1
No. 272, Golden Centre	1	No. 522, Rocky Rapids	1
No. 277, Michichi	1	No. 546, Wostok	1
No. 278, Carbon	4	No. 547, Leslie	2
No. 308, Ghost Pine	2	No. 574, St. Lina	1
No. 366, Dublin	1	No. 575, Vilna	1
No. 367, Waverly	1	No. 578, Opal	1
No. 401, Lochearn	1	No. 609, Pibroch	1
No. 424, Kinsella	1	No. 829, Spirit River	1
No. 425, Sterling	1	No. 857, Peace	1
No. 456, Parkland	3		

VISITS OF TRAVELLING DIAGNOSTICIAN

Place.	No. of Visits.	No. of Patients Examined.	Place.	No. of Visits.	No. of Patients Examined.
Camrose	2	29	Stettler	1	1
Lethbridge	4	151	Donalda	1	4
Coalhurst	3	13	Red Deer	1	3
Vulcan	2	31	Wetaskiwin	1	6
Macleod	1	8	Tofield	1	7
Gratum	1	3	Ryley	1	1
Claresholm	1	4	Viking	1	14
Drumheller	1	7	Wainwright	1	2
Craigmyle	1	2	Provost	1	4
Wayne	1	1	Killam	1	4
Hanna	1	2	High River	1	13
Cereal	1	1	Lamont	1	9
Oyen	1	10			
Coronation	1	3	Total	34	339
Castor	1	6			

DONATIONS AND ENTERTAINMENTS, 1931

ENTERTAINMENTS: Little Theatre Association; Mr. W. J. S. Walker; Mrs. E. J. Anderson, Concert Party (2 Concerts); Knox United Young Peoples' Society; Adlam College of Music; C.P.R. Choir; Adventist Young Peoples' Society; Elks' Band (2 Concerts); Grace Church Young Peoples' Society; Welsh Concert Party; Mr. H. Pollard; Salvation Army Band; The Dumbells; Women's Musical Club (2 Concerts); Military Chapter I.O.D.E.; Alice Murdoch Dancing Academy; Mr. B. N. Sanson, Banff; Band 1st Calgary Regiment.

PASSES: Capitol Theatre; Palace Theatre; Mr. E. Richardson (for Stampede); His Worship the Mayor of Calgary (Stampede Parade).

DRIVES: Mr. N. J. Christie; T. Eaton Co. (cars for Stampede Parade).

CLOTHING REQUIRED FOR PATIENTS: Calgary Tuberculosis Society; Edmonton Civic Relief; Medicine Hat Civic Relief; The Canadian Legion.

CHEQUES FOR CHRISTMAS CHEER: Samaritan Club; Capt. McPhail Chapter I.O.D.E.; Mr. H. C. Farthing; Alberta Military Institute; Branch 52, Canadian Legion; Lt.-Col. J. H. Woods.

PARCELS FOR INDIVIDUAL PATIENTS: Red Cross Society; Calgary Tuberculosis Society; Edmonton Public Welfare Board; Catholic Women's League; Junior Catholic Women's League; Masonic Order; Military Chapter I.O.D.E.

MISCELLANEOUS: Ontario Laundry; Mr. A. J. Weyers; Rotary Club; Y.W.C.T.U., Claresholm; Dr. J. B. McKay; Mr. D. A. Perry, Strathmore; Keystone Brotherhood; Army and Navy Club; also many donations of books and magazines.

ANNUAL REPORT
OF THE
Vital Statistics Branch
OF THE
DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF ALBERTA
1931

CONTENTS

	Page
Introductory Letter	5
Population Statistics by Divisions	8
Summary of Births, Deaths and Marriages in Alberta.....	13
Births—By Months	15
Births—Legitimate, Illegitimate and Plural	18
Births—According to Birthplace of Parents	19
Births—According to Ages of Parents	21
Births—According to Racial Origin of Parents	23
Births—Non-resident Mothers in Alberta	25
Births—Resident and Non-resident Mothers	25
Births—Order of Birth—By Age of Mother	26
Infantile Mortality Tables	27
Deaths of Children—By Months	28
Deaths of Children by Ages	30
Deaths of Children—According to Residence of Decedents	32
Births and Deaths by Municipalities	33
Deaths—Causes by Sex and Age in Whole Province	47
Deaths—Causes by Conjugal Condition and Nativity in Whole Province	64
Deaths—Causes by Months for Whole Province	81
Deaths—Causes by Sex and Age in Edmonton	98
Deaths—Causes by Conjugal Condition and Nativity in Edmonton....	110
Deaths—Causes by Months in Edmonton	122
Deaths—Causes by Sex and Age in Calgary	134
Deaths—Causes by Conjugal Condition and Nativity in Calgary.....	145
Deaths—Causes by Months in Calgary	156
Deaths—According to Residence of Decedents	167
Deaths—Non-resident in Alberta	167
Deaths—From Selected Causes (Numbers)	168
Deaths—From Selected Causes (Percentage)	169
Marriages—By Months	170
Marriages—By Conjugal Condition	170
Marriages—By Ages	171
Marriages—By Birthplace	172
Marriages—By Religious Denominations	174
Divorces	175
Births—Indian	176
Deaths—Indians by Sex and Age	177
Birth, Marriage, Death and other Rates for Various Years.....	183
Deaths and Rates from Puerperal Conditions	183
Summary	184

VITAL STATISTICS BRANCH

(Donald Mackie, Deputy Registrar General)

The population of the Province of Alberta in the middle of the year 1931 was, according to the Dominion Census, 731,605.

Living births registered in Alberta during the year numbered 17,252, being a birth rate of 23.57 per 1,000 population, and is 397 less than the number for the preceding year.

Of the 17,252 children whose births were registered, 8,938 were males and 8,314 were females, the ratio of male to female children being 1,075 males to 1,000 females, the average ratio for the previous ten years being 1,049 males to 1,000 females. There were 532 twins and 9 triplets. The illegitimate children registered during the year numbered 635 or 3.7 per cent. of the births; this being 78 more than the number for the preceding year.

Of the total births registered, 7,928 occurred in the cities and towns of over 1,000 population, 8,616 in the rural districts, and 708 were Indians. The births registered in the four large cities are as follows: Edmonton 2,400, Calgary 1,885, Lethbridge 572, and Medicine Hat 401.

For comparison, the following are the birth rates in the Canadian Provinces for the year 1931:

Canada	23.2	Ontario	20.2
Prince Edward Island	21.4	Manitoba	20.5
Nova Scotia	22.5	Saskatchewan	23.1
New Brunswick	26.5	Alberta	23.6
Quebec	29.1	British Columbia	14.9

Marriages registered in Alberta during the year numbered 5,142. This number is 192 less than that of the previous year, and 122 less than the average of the 5 preceding years, and constitutes a rate of 7.02 per 1,000 population, which is still the highest marriage rate in any Canadian Province, the rate for Canada and the Provinces being as follows for the year 1931:

Canada	6.4	Ontario	6.9
Prince Edward Island	5.6	Manitoba	7.0
Nova Scotia	6.6	Saskatchewan	6.2
New Brunswick	6.2	Alberta	7.0
Quebec	5.8	British Columbia	5.6

There were 139 brides 16 years of age and under, 1,294 brides between the ages of 17 and 19, 2,268 between the ages of 20 and 24, 19 brides and 44 grooms were over 60 years of age, 10 of the grooms and 7 of the brides being over 70 years. The marriages in the four large cities were as follows: Edmonton 1,214, Calgary 1,039, Lethbridge 213, and Medicine Hat 143.

The divorces made absolute during the year numbered 156, which is 5 more than the number for the previous year, and 1 more than the average for the preceding 5 years; 69 were granted to husbands and 87 to wives.

The deaths of 5,302 persons (including Indians) were registered in Alberta during the year 1931, of whom 3,095 were males and 2,207 were females. This number is 194 less than in the pre-

vious year, and constitutes a death rate of 7.24 per 1,000 population, being a decrease of 1.09 compared with the previous year. This rate is the lowest provincial rate in Canada with the exception of the Province of Saskatchewan. The following are the death rates for the various provinces during the year 1931:

Canada	10.1	Ontario	10.4
Prince Edward Island	10.4	Manitoba	7.6
Nova Scotia	11.5	Saskatchewan	6.6
New Brunswick	11.4	Alberta	7.2
Quebec	12.0	British Columbia	8.8

Amongst the various causes of death, Heart Disease was again in the lead with a percentage of 9.49 of the total deaths, a decrease from the previous year's total of .77. Cancer was again second, accounting for 8.32 of the total deaths, being a decrease of .43 from the previous year. Pneumonia was third with 7.73 of the total deaths, being a decrease of .79, and Violent Deaths was again fourth with 7.70, a decrease of .72, representing 55 less deaths from violence. Influenza, which has increased from 2.37 of the total deaths in 1930 to 3.51 in 1931, is still considerably under the average of previous years. There has been a marked decrease in Puerperal Deaths, the number having dropped from 114 to 87, being 33 less in the total deaths and an actual decrease in this class of 24 per cent. Deaths from contagious diseases again show a satisfactory decline in practically all causes.

The following table shows in order of frequency those causes of death which during the year or in previous years accounted for at least 1 per cent. of the total deaths. Both the actual numbers and the percentage of each is given, together with the figures for the three preceding years, for purposes of comparison.

Causes of Death	1931		1930		1929		1928	
	Number	Per cent. of Total	Number	Per cent. of Total	Number	Per cent. of Total	Number	Per cent. of Total
Diseases of the Heart	503	9.49	564	10.26	564	9.05	549	9.63
Malignant Tumors	441	8.32	482	8.75	452	7.25	415	7.28
Pneumonia (all forms)	410	7.73	468	8.52	561	9.00	471	8.26
Violent Deaths (suicides excepted)	408	7.70	463	8.42	474	7.60	460	8.07
Diseases of the Circulatory System (heart excepted)	389	7.34	252	4.59	223	3.57	257	4.52
Pulmonary Tuberculosis	306	5.77	321	5.84	321	5.15	255	4.47
Influenza	186	3.51	130	2.37	429	6.88	315	5.53
Nephritis	168	3.17	172	3.13	211	3.38	229	4.02
Diarrhoea and Enteritis (under 2 yrs. of age)	153	2.89	128	2.33	145	2.32	124	2.18
Appendicitis	132	2.49	137	2.49	152	2.44	126	2.21
Apoplexy	126	2.38	116	2.11	131	2.10	123	2.16
Suicides	123	2.32	113	2.06	84	1.35	88	1.54
Diseases and Accidents of Pregnancy	87	1.64	114	2.07	123	1.98	64	1.12
Whooping Cough	32	.60	51	.93	90	1.12	45	.79
Diphtheria	25	.47	30	.55	64	1.03	50	.88
Typhoid Fever	16	.30	16	.29	26	.42	26	.46
Scarlet Fever	8	.15	31	.56	45	.73	25	.44
Measles	7	.13	13	.24	82	1.31	19	.33

The foregoing list comprises 3,520 deaths, and amounts to 66.4 per cent. of the total deaths for the year.

The deaths of children less than one year old numbered 1,197, being 75 more than the previous year. This constitutes an infantile mortality rate of 69.4 per 1,000 births, an increase of 5.9 over the previous year, but is 5.3 less than that of the average of the 5 preceding years.

The following table gives for the purposes of comparison the infantile mortality rate in the undernoted provinces for the year 1931:

Canada	84.8	Ontario	69.8
Prince Edward Island	68.1	Manitoba	64.3
Nova Scotia	78.8	Saskatchewan	69.0
New Brunswick	87.4	Alberta	69.4
Quebec	112.9	British Columbia	49.7

There was again an increase in deaths by suicides, the number being 123 compared with 113 for the previous year. Deaths by murder and manslaughter were 25, an increase of 3 over the previous year. Stillbirths decreased to 453 as compared with 525 for the year 1930.

DIVISIONS OF ALBERTA FOR CENSUS AND VITAL STATISTIC PURPOSES

As the Province of Alberta is not divided into Counties, and the political divisions are not permanently fixed, it has been found advisable to use as smaller areas the Dominion Census Divisions.

These Divisions are fixed, and as the population increases, may be subdivided without destroying their value for purposes of Vital Statistic comparison with preceding years.

The following table shows these Census areas divided into Municipalities, Local Improvement Districts, Cities, Towns and Villages with the 1931 and 1926 official Division population figures.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICI-
PALITIES FOR CENSUS YEARS, 1931 AND 1926

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1931	1926		1931	1926
Province	731,605	607,599	Division No. 2—Continued:		
Division No. 1: Medicine Hat	28,849	25,624	Towns—Continued:		
1 L.I.D.	90	64	Coleman	1,704	2,044
2 L.I.D.	128	134	Diamond City	119	290
3 L.I.D.	152	127	Granum	329	272
4 L.I.D.	526	554	Macleod	1,447	1,715
5 L.I.D.	1,097	876	Magrath	1,224	1,202
6 L.I.D.	678	482	Pincher Creek	1,024	1,003
31 L.I.D.	38	38	Raymond	1,849	1,779
32 L.I.D.	580	531	Villages	2,161	1,935
33 Flowery Plains	477	513	Coaldale	251	164
34 Burlington	793	773	Coalhurst	953	796
35 L.I.D.	307	215	Cowley	151	148
36 Warner	1,214	956	Frank	268	299
61 L.I.D.	808	799	Monarch	117	97
62 L.I.D.	684	682	Pincher City	45	50
63 L.I.D.	570	449	Stirling	376	326
64 Forty Mile	1,060	1,118			
65 Eureka	1,148	779	Division No. 3: Bow.....	15,066	12,149
66 L.I.D.	2,082	1,464	96 McLean	713	668
91 L.I.D.	1,115	1,007	121 L.I.D.	452	367
92 Excelsior	905	776	122 L.I.D.	357	364
93 L.I.D.	852	612	123 Sunny South	209	137
94 Bow Island	605	542	124 L.I.D.	30	42
Cities	10,300	9,536	125 L.I.D.	713	130
Medicine Hat	10,300	9,536	126 L.I.D.	620	454
Towns	1,827	1,851	151 L.I.D.	1,097	831
Bow Island	314	299	152 L.I.D.	129	125
Irvine	234	210	153 King	135	153
Taber	1,279	1,342	154 L.I.D.	620	145
Villages	813	746	155 L.I.D.	772	650
Burdett	121	112	156 L.I.D.	673	668
Milk River	350	211	181 L.I.D.	1,304	1,199
Warner	342	313	182 L.I.D.	349	355
Division No. 2: Macleod	57,186	51,103	183 Britannia	477	426
7 L.I.D.	369	324	184 L.I.D.	169	138
8 L.I.D.	1,474	1,360	185 L.I.D.	1,634	1,226
9 L.I.D.	1,580	1,495	186 L.I.D.	803	561
10 Cochrane	1,320	1,409	211 L.I.D.	548	436
37 Sugar City	1,993	1,692	Towns	2,515	2,204
38 L.I.D.	1,276	1,156	Bassano	615	777
39 Kerr	2,007	1,522	Brooks	708	511
40 Castle River	540	582	Redcliffe	1,192	916
67 L.I.D.	4,691	3,470	Villages	747	870
68 L.I.D.	2,340	1,435	Alderson	81	79
69 Bright	1,442	1,300	Duchess	114	136
70 Livingstone	1,502	1,511	Empress	314	374
71 L.I.D.	4,282	3,965	Enchant	92	70
99 Argyle	1,900	1,805	Jenner	62	44
100 L.I.D.	677	640	Retlaw	84	91
101 L.I.D.	192	149			
Indian Reserves	1,798	1,694	Division No. 4: Nanton	29,067	24,775
Cities	13,489	10,735	97 L.I.D.	2,258	1,486
Lethbridge	13,489	10,735	98 Little Bow	1,589	1,581
Towns	12,153	12,924	127 Clifton	1,043	820
Blairmore	1,629	1,609	128 Harmony	1,157	1,152
Cardston	1,672	2,034	129 Clear Lake	2,231	2,198
Claresholm	1,156	956	130 L.I.D.	395	306
			131 L.I.D.	46	45

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1931 AND 1926—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1931	1926		1931	1926
Division No. 4—Continued:			Division No. 6—Continued:		
157 Marquis	1,923	2,147	279 Norquay	2,170	2,354
158 Royal	1,751	1,802	280 Rosebud	2,177	2,156
159 Riley	1,959	2,052	281 Beaver Dam	1,926	1,665
160 L.I.D.	381	305	282 L.I.D.	593	508
161 L.I.D.	40	39	308 Ghost Pine	2,129	2,206
189 Dinton	1,990	1,855	309 Stauffer	2,027	1,975
190 Sheep Creek	1,988	1,861	310 Mountain View	2,506	2,371
191 Stockland	2,907	1,779	311 Westerdale	2,420	2,224
192 L.I.D.	8	5	Unorganized parts	2,238	1,926
Towns	4,343	4,035	Indian Reserves	2,109	1,636
Carmangay	279	290	Banff	2,519	2,206
High River	1,459	1,377	Cities	86,748	67,869
Nanton	739	729	Calgary	83,761	65,291
Okotoks	760	579	Drumheller	2,937	2,578
Stavely	303	285	Towns	3,475	3,422
Vulcan	803	775	Didsbury	801	785
Villages	3,058	1,306	Gleichen	514	510
Arrowwood	293	.....	Olds	1,056	1,003
Barons	284	256	Strathmore	523	540
Black Diamond	683	.....	Three Hills	581	584
Blackie	251	289	Villages	3,965	3,742
Cayley	127	191	Acme	234	220
Champion	310	287	Airdrie	198	191
Lomond	176	147	Beiseker	230	212
Milo	135	.....	Carbon	355	426
Nobleford	143	136	Carstairs	387	381
Turner Valley	656	.....	Cluny	134	192
Division No. 5: Acadia	26,651	27,247	Cochrane	293	282
212 L.I.D.	697	591	Crossfield	321	317
213 L.I.D.	398	374	Hussar	151	.....
214 Berry Creek	581	534	Irricana	161	132
215 Bulvea	316	336	Langdon	83	94
241 Acadia	1,029	841	Newcastle	304	281
242 Cereal	1,103	1,025	Rockyford	194	188
243 Collholme	807	711	Rosebud	101	152
244 Flowerdale	704	718	Standard	218	221
245 Lonebutte	613	637	Swalwell	95	.....
246 L.I.D.	1,180	308	Trochu	506	453
271 Bertawan	1,186	1,229	Division No. 7: Battle River	38,106	35,991
272 Golden Centre	1,227	1,130	331 L.I.D.	1,180	1,147
273 Sounding Creek	740	752	332 L.I.D.	1,015	998
274 Richdale	788	721	333 L.I.D.	1,255	1,146
275 Hand Hills	1,189	1,099	334 Coronation	2,022	1,865
277 Michichi	2,178	2,015	335 Sullivan Lake	707	719
301 Canmer	814	1,035	361 Rosenheim	1,744	1,563
302 Stewart	372	857	362 Hillcrest	1,200	1,218
303 Wiste	1,199	1,073	363 Stocks	1,186	1,133
304 Hiram	796	617	364 Flagstaff	1,683	1,841
305 Dowling Lake	1,482	1,350	365 Progress	1,999	1,896
306 Lambton	1,651	1,694	391 Sifton	1,475	1,537
307 Starland	1,446	1,378	392 Vale	958	886
Towns	1,862	4,435	393 Huamha	1,233	1,123
Hanna	1,490	1,400	394 Asquith	1,205	1,222
Youngstown	372	457	395 Wheatland	1,819	1,605
Villages	1,724	1,787	421 Ribstone	1,452	1,300
Cereal	185	150	422 Gilt Edge	1,674	1,438
Chinook	176	198	423 Battle River	1,466	1,097
Craigmyle	236	232	424 Kinsella	1,237	1,053
Delia	286	329	425 Stirling	1,925	2,110
Morrin	149	162	455 Iron Creek	2,121	1,941
Munson	164	223	Towns	2,947	2,892
Oyen	401	346	Castor	634	651
Richdale	44	58	Coronation	738	713
Rumsey	83	89	Hardisty	428	500
Division No. 6: Calgary	140,624	114,841	Wainwright	1,147	1,028
216 L.I.D.	520	297	Villages	4,603	4,261
217 L.I.D.	794	977	Alliance	260	278
218 Blackfoot	1,590	1,787	Cadogan	128	116
219 Bow Valley	1,679	1,981	Chauvin	269	269
220 Shepard	3,048	2,470	Compeer	94	.....
221 Springbank	2,166	1,716	Consort	299	196
222 L.I.D.	438	372	Czar	140	117
247 L.I.D.	1,073	945	Edgerton	189	182
248 Grasswold	1,448	1,495	Forestburg	291	209
249 Keoma	1,525	1,440	Galahad	150	142
250 Beddington	2,272	2,339	Hughenden	191	159
251 L.I.D.	1,427	931	Irma	196	190
252 L.I.D.	277	249	Killam	326	365
278 Carbon	5,365	4,160	Lougheed	218	265
			Monitor	137	139

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1931 AND 1926—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1931	1926		1931	1926
Division No. 7—Continued:			Division No. 9—Continued:		
Provost	533	476	Unorganized parts	2,895	1,765
Sedgewick	338	362	Indian Reserves	249	.....
Strome	172	182	Jasper	1,230	910
Veteran	180	167	Villages	2,319	1,926
Viking	492	447	Bentley	233	211
Division No. 8: Red Deer...	61,016	57,693	Bowden	233	202
336 Success	1,705	1,592	Eckville	169	178
337 Vimy	1,074	1,140	North Red Deer	318	293
338 Hays	2,364	2,458	Rimbey	304	280
339 Pine Lake	2,098	1,974	Rocky Mt. House	646	467
340 Arthur	2,177	1,952	Sylvan Lake	416	295
366 Dublin	1,425	1,356	Division No. 10: Victoria ...	58,049	51,835
367 Waverly	1,995	1,839	451 Merton	1,792	1,221
396 Haig	1,486	1,456	452 Grizzly Bear	1,396	997
397 Lakeside	1,622	1,517	453 Buffalo Coulee	1,292	1,067
398 Lamerton	2,205	2,291	454 Lakeview	1,525	1,389
399 Crown	3,689	3,644	481 Wellington	1,888	1,539
426 Melrose	2,537	2,425	482 Vermilion Valley	1,843	1,416
427 Evergreen	2,592	2,677	483 Melberta	1,992	1,605
428 Waterglen	1,386	1,346	484 Birch Lake	2,312	2,163
429 Fertile Valley	3,856	2,080	485 Patricia	2,111	1,789
456 Parkland	2,971	2,851	486 Beaver Lake	3,028	2,915
457 Lloyd George	2,791	2,702	511 Streamstown	2,254	1,773
458 Montgomery	3,329	3,298	512 Ethelwyn	3,035	2,485
459 Bigstone	2,807	2,386	513 Ukraina	3,245	2,806
Indian Reserves	1,141	971	514 Sobor	3,326	2,933
Cities	4,469	3,905	515 Norma	3,201	3,047
Red Deer	2,344	2,021	516 The Pines	3,464	2,464
Wetaskiwin	2,125	1,884	545 Eagle	4,100	3,896
Towns	7,455	8,412	546 Westok	4,584	4,520
Big Valley	455	767	547 Leslie	3,725	3,815
Camrose	2,258	2,002	Towns	3,468	3,324
Daysland	404	490	Lloydminster (part)..	539	400
Innisfali	1,024	944	Vegreville	1,659	1,721
Lacombe	1,259	1,151	Vermilion	1,270	1,203
Ponoka	836	1,931	Villages	4,468	3,671
Stettler	1,219	1,127	Andrew	115	.....
Villages	3,842	3,421	Bruderheim	280	328
Alix	241	229	Chipman	284	330
Bashaw	385	418	Derwent	107	.....
Bawlf	183	184	Holden	230	214
Bittern Lake	47	37	Innisfree	227	219
Blackfalds	84	105	Islay	141	172
Botha	107	128	Kitscoty	280	266
Clive	215	208	Lamont	507	506
Delburne	193	151	Lavoy	151	143
Donalda	169	191	Mannville	307	314
Edberg	131	.....	Minburn	119	139
Elnora	153	.....	Mundare	832	820
Erskine	174	160	Mynnam	131	.....
Ferintosh	161	126	Ranfurly	122	.....
Gadsby	144	162	Ryley	236	220
Halkirk	160	165	Two Hills	149	.....
Heisler	125	113	Willington	250	.....
Millet	300	241	Division No. 11: Edmonton..	126,832	106,592
Mirror	534	431	487 Cornhill	2,753	2,381
New Norway	142	137	488 Black Mud	3,797	3,396
Ohaton	69	74	489 Liberty	4,662	4,509
Penhold	125	161	490 Pioneer	2,603	1,493
Division No. 9: Rocky Moun-			491 L.I.D.	907	345
tain House	24,503	20,024	517 Clover Bar	2,754	2,887
312 Waterloo	1,008	665	518 Strathcona	3,555	3,363
341 Poplar Grove	2,540	2,366	519 Spruce Grove	3,499	3,168
342 Raven	1,712	1,447	520 Inga	2,851	2,503
343 Prairie Creek	610	528	521 Tomahawk	1,432	602
344 L.I.D.	48	17	548 Sturgeon	4,302	3,706
371 Golden West	2,266	2,110	549 Ray	3,558	3,261
400 Lorne	2,284	2,162	550 Woodford	2,408	2,031
401 Lochearn	2,221	2,052	551 Morthen	2,224	1,824
403 L.I.D.	347	269	Indian Reserves	336	782
430 Blindman	1,376	1,439	Cities	79,197	65,163
431 Last West	1,074	894	Edmonton	79,197	65,163
432 L.I.D.	17	9	Towns	5,401	4,914
433 L.I.D.	24	9	Beverly	1,111	931
434 L.I.D.	366	324	Fort Saskatchewan ..	1,001	943
460 Columbia	1,104	742	Leduc	900	832
461 L.I.D.	712	344	Morinville	570	562
462 L.I.D.	101	16	St. Albert	825	684
463 L.I.D. .....	.....	1	Stony Plain	497	456
464 T. 44-46, R. 13-15, W. 5	.....	.....	Tofield	497	506

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1931 AND 1926—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1931	1926		1931	1926
Division No. 11—Continued:			Division No. 14—Continued:		
Villages	593	264	581 Pershing	1,664	939
Alberta Beach	38	.....	606 L.I.D.	131	63
Hay Lakes	125	.....	607 L.I.D.	887	525
Onoway	149	70	608 Tawatinaw	8,147	1,168
Seba Beach	41	.....	609 Pibroch	2,210	1,660
Spruce Grove	76	.....	610 Shoal Creek	2,095	1,450
Wabamun	164	194	611 L.I.D.	406	133
Division No. 12: Edson	13,815	10,968	636 L.I.D.	217	113
493 L.I.D.	4	4	637 Cartier	1,273	890
496 L.I.D.	902	664	638 Nelson	1,486	874
522 Rocky Rapids	1,148	343	639 L.I.D.	757	393
523 L.I.D.	13	4	640 L.I.D.	687	278
525 L.I.D.	24	29	665 L.I.D.	1,130	822
526 L.I.D.	116	156	667 L.I.D.	1,342	645
527 L.I.D.	244	114	668 Grosmont	886	466
552 Pembina	2,041	1,212	669 L.I.D.	79	130
553 L.I.D.	728	319	696 L.I.D.	144	39
554 L.I.D.	685	341	697 L.I.D.	499	283
555 L.I.D.	655	357	698 L.I.D.	40	11
556 L.I.D.	274	249	699 L.I.D.	357	100
557 L.I.D. ....	.....	.....	726 L.I.D.	274	12
558 L.I.D.	57	70	727 L.I.D.	76	60
582 Kitchener	2,340	1,906	728 T. 71-74, R. 22-24,	.....	.....
583 L.I.D.	654	736	W. 4, N. of Athabasca	.....	.....
584 L.I.D.	543	349	R. ....	.....	25
586 T. 56-59, R. 19-22,	.....	.....	729 L.I.D.	120	53
W. 5, and S.E. of	.....	.....	Towns	573	435
Athabasca R. ....	.....	3	Athabasca	573	435
587 T. 56-58, R. 21-24,	.....	.....	Villages	1,973	1,625
W. 5, and W. of Ath-	.....	.....	Barrhead	222	.....
abasca R. and St.	.....	.....	Clyde	186	177
Berland R. ....	.....	.....	Lac la Biche	313	437
588 L.I.D.	6	.....	Legal	350	308
612 L.I.D.	341	254	Smoky Lake	366	310
Territorial Units 615,	.....	.....	Westlock	536	393
585	12	13	Division No. 15: Clearwater	13,664	6,328
Unorganized parts	1,133	2,182	613 L.I.D.	53	.....
Towns	1,547	1,493	641 L.I.D.	543	161
Edson	1,547	1,493	642 L.I.D.	9	2
Villages	348	170	705 L.I.D.	24	.....
Entwistle	189	170	706 L.I.D.	270	22
Mayerthorpe	159	.....	707 L.I.D.	141	99
Division No. 13: Beaver R...	24,936	17,174	708 L.I.D.	25	.....
541 L.I.D.	745	492	709 L.I.D.	42	28
542 Lincoln	933	631	710 L.I.D.	78	.....
543 Laurier	2,646	2,210	730 L.I.D.	175	111
544 Champlain	2,257	1,562	731 L.I.D.	363	300
571 L.I.D.	65	5	732 L.I.D.	578	422
572 Bonnyville	1,419	915	733 L.I.D.	504	307
573 St. Vincent	2,554	1,826	734 L.I.D.	149	22
574 St. Lina	817	509	735 L.I.D.	147	3
575 Vilna	3,756	3,502	736 L.I.D.	41	2
601 L.I.D.	760	136	737 L.I.D.	23	2
602 L.I.D.	1,105	314	738 L.I.D.	414	77
603 L.I.D.	615	160	764 L.I.D.	1,333	566
604 L.I.D.	497	161	765 L.I.D.	1,101	393
605 Ashmont	1,616	1,327	766 L.I.D.	503	58
631 L.I.D.	677	350	767 L.I.D.	24	1
633 L.I.D.	82	33	794 L.I.D.	141	54
634 L.I.D.	186	111	795 L.I.D.	648	307
635 L.I.D.	568	239	796 L.I.D.	2,408	1,061
663 L.I.D. ....	.....	.....	824 L.I.D.	10	.....
664 L.I.D.	13	14	825 L.I.D.	215	99
666 L.I.D.	320	146	826 L.I.D.	891	228
695 L.I.D.	218	66	855 L.I.D.	477	208
Territorial Units 632,	.....	.....	676, 677, 678, 679, 622,	.....	.....
661	5	3	670, and other parts..	47	20
Indian Reserves	1,514	1,398	Indian Reserves	909	843
Villages	1,568	1,064	Towns	1,125	930
Bellis	117	.....	Grouard	261	348
Bonnyville	362	.....	Peace River	864	582
St. Paul de Metis	938	933	Villages	253	.....
Vilna	151	131	Falher	253	.....
Division No. 14: Sturgeon ..	39,508	29,062	Division No. 16: Peace River	27,945	11,352
576 Smoky Lake	4,268	4,161	739 Grande Prairie	2,389	1,274
577 Unity	4,919	4,019	740 Bear Lake	2,683	1,802
578 Opal	3,286	2,924	741 L.I.D.	1,566	638
579 Hazelwood	3,438	2,958	742 L.I.D.	460	167
580 Lockerbie	2,444	1,808	769 L.I.D.	514	82
			770 L.I.D.	871	236
			771 L.I.D.	1,730	775

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1931 AND 1926—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1931	1926		1931	1926
Division No. 16—Continued:			Division No. 16—Continued:		
772 L.I.D.	1,358	340	919 L.I.D.	24	19
797 L.I.D.	549	108	Unorganized parts	72	.....
800 L.I.D.	296	77	Indian Reserves	1,068	201
801 L.I.D.	167	.....	Towns	1,464	917
827 L.I.D.	161	3	Grande Prairie	1,464	917
828 L.I.D.	381	149	Villages	1,715	242
829 Spirit River	1,800	893	Beaver Lodge	211	.....
830 L.I.D.	738	77	Clairmont	110	75
831 L.I.D.	437	34	Fairview	260	.....
857 Peace	1,990	1,377	Grimshaw	137	.....
858 Fairview	2,264	1,507	Hythe	278	.....
859 L.I.D.	519	84	Sexsmith	304	.....
886 L.I.D.	508	150	Spirit River	232	167
887 L.I.D.	525	160	Wembley	183	.....
888 L.I.D.	581	21			
889 L.I.D.	425	29	Division No. 17: Athabasca	5,788	4,841
890 L.I.D.	34	.....	Remainder of the Province		
891 L.I.D.	77	.....	comprising Northern		
916 L.I.D.	231	.....	parts	4,312	3,045
917 L.I.D.	298	.....	Indian Reserves	1,476	1,796

TABLE 1.—GENERAL SUMMARY OF BIRTHS, MARRIAGES AND DEATHS IN DIVISIONS, CITIES AND TOWNS OF 1,000 POPULATION AND OVER,
ALBERTA, 1931

Divisions, Cities and Towns	DEATHS												Stillbirths	Marriages	
	Births (Exclusive of Still- births)			All Ages			Under 1 year			1-4 years					5 years and over
	M.		F.	Total	M.	F.	M.	F.	M.	F.	M.	F.			
	Total		F.	Total	M.	F.	M.	F.	M.	F.	M.	F.			
ALBERTA	17252	8938	8314	5302	3095	2207	675	522	140	135	2280	1550	453	5142	
Division No. 1	717	381	386	231	124	107	33	14	4	8	87	85	9	166	
Division No. 2	1496	794	702	411	244	167	62	46	9	9	173	112	34	463	
Division No. 3	310	162	148	75	39	36	9	8	2	4	28	24	5	40	
Division No. 4	414	215	199	137	87	50	11	8	3	1	73	41	13	70	
Division No. 5	394	204	190	122	71	51	17	15	2	1	52	35	8	80	
Division No. 6	2964	1545	1419	1099	649	450	93	69	26	33	530	348	92	1276	
Division No. 7	808	433	375	256	142	114	18	24	8	5	116	85	25	209	
Division No. 8	1276	660	616	507	285	222	46	43	11	10	228	169	48	386	
Division No. 9	403	213	190	116	76	40	14	13	5	5	57	22	8	57	
Division No. 10	1478	736	742	353	203	150	63	40	9	13	131	97	35	296	
Division No. 11	3359	1729	1630	1054	636	418	120	98	23	14	493	306	92	1387	
Division No. 12	292	137	155	75	45	30	12	10	....	4	33	16	6	31
Division No. 13	871	457	414	253	154	99	60	39	14	9	80	51	18	167	
Division No. 14	1115	574	541	256	137	119	46	48	9	5	82	66	26	185	
Division No. 15	419	203	210	129	78	51	32	19	6	4	40	28	14	86	
Division No. 16	742	383	359	172	96	76	31	25	7	6	58	45	14	203	
Division No. 17	194	106	88	56	29	27	8	3	2	4	19	20	6	40	
CITIES:															
Calgary	1885	963	922	695	410	285	47	35	15	13	348	237	68	1039	
Drumheller	276	147	129	57	38	19	10	5	4	1	24	13	5	54	
Edmonton	2400	1262	1138	797	482	315	84	62	16	7	382	246	68	1214	
Lethbridge	572	304	268	166	98	68	25	24	4	1	69	43	18	213	
Medicine Hat	401	213	188	149	77	72	16	7	3	5	58	60	6	143	
Red Deer	101	48	53	43	21	22	3	2	1	1	17	19	5	82	
Wetaskiwin	114	65	49	50	27	23	5	5	1	....	21	18	3	44
TOWNS:															
Beverly	14	4	10	2	2	....	....	....	....	....	2	....	....	25
Blairmore	32	18	14	6	5	1	1	....	....	....	4	....	....	59
Camrose	103	54	49	34	24	10	4	2	1	....	19	8	12	60
Cardston	157	88	69	24	14	10	4	1	....	....	10	9	3	12
Clareholm	50	25	25	27	14	13	2	....	....	....	12	12	1	12

TABLE 1.—GENERAL SUMMARY OF BIRTHS, MARRIAGES AND DEATHS IN DIVISIONS, CITIES AND TOWNS OF 1,000 POPULATION AND OVER,
ALBERTA, 1931—Continued

Divisions, Cities and Towns	Births (Exclusive of Still- births)			DEATHS						Stillborn	Marriages		
	Total	M.	F.	All Ages		Under 1 year		1-4 years				5 years and over	
				Total	M.	F.	M.	F.	M.			F.	
Coleman	58	31	27	18	13	5	2	1	1	1	10	3	26
Edson	69	32	37	25	17	8	6	1	1	2	11	5	20
Fort Saskatchewan	46	25	21	15	10	5	...	...	...	...	19	4	7
Grande Prairie	176	86	90	39	22	17	4	7	1	2	17	8	62
Hanna	139	74	65	43	29	14	4	4	1	2	24	10	37
High River	128	66	62	34	22	12	3	3	1	1	18	8	21
Innisfail	126	62	64	31	14	17	1	5	1	1	12	11	23
Lacombe	93	46	47	26	15	11	1	1	...	...	14	6	36
Macleod	58	32	26	23	15	8	1	1	...	...	14	7	18
Magrath	69	37	32	9	4	5	1	3	...	...	8	2	9
Olds	99	53	46	24	11	13	4	2	...	1	7	10	27
Pincher Creek	57	31	26	21	18	3	1	1	1	...	16	2	17
Raymond	92	48	44	11	8	3	4	1	1	...	3	2	6
Redcliff	18	11	7	6	4	2	1	...	...	...	3	2	4
Stettler	94	38	56	30	16	14	2	2	1	...	13	12	35
Taber	89	46	43	22	16	6	8	1	1	...	18	4	6
Vegreville	216	120	96	40	20	20	4	6	...	4	16	10	26
Vermilion	121	65	56	26	13	13	3	1	1	...	9	12	48
Wainwright	75	32	43	20	12	8	3	1	2	...	7	5	36

TABLE No. 2.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) BY MONTHS, CLASSIFIED AS RURAL AND URBAN, BY DIVISIONS, ALBERTA, 1931

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
ALBERTA	17252	1436	1322	1504	1483	1534	1474	1480	1487	1424	1404	1318	1386
Rural	9324	743	687	807	818	810	800	783	805	815	752	721	783
Urban	7928	693	635	697	665	724	674	697	682	609	652	597	603
DIVISION No. 1—MEDICINE HAT	717	51	61	56	58	68	70	63	66	51	63	52	58
Rural	227	13	14	17	14	25	25	14	21	18	21	22	23
Urban	490	38	47	39	44	43	45	49	45	33	42	30	35
City of Medicine Hat	401	31	32	32	35	35	36	42	39	28	34	25	32
Town of Taber	89	7	15	7	9	8	9	7	6	5	8	5	3
DIVISION No. 2—MACLEOD	1496	117	106	132	123	135	135	130	140	116	135	100	127
Rural	351	27	19	33	29	25	26	24	29	28	40	27	44
Urban	1145	90	87	99	94	110	109	106	111	88	95	73	83
City of Lethbridge	572	45	42	51	47	58	63	51	49	44	51	33	38
Town of Blairmore	32	2	3	2	3	—	4	5	4	4	3	1	1
Cardston	157	7	8	14	11	24	15	16	24	10	8	12	8
Clareholm	50	5	9	5	1	5	5	3	2	4	5	3	3
Coleman	58	7	1	3	8	6	6	6	6	3	3	6	6
Macleod	58	7	9	3	8	2	3	6	6	4	3	2	5
Magrath	69	6	6	9	8	4	9	6	4	7	8	6	6
Pincher Creek	57	3	2	2	7	4	1	4	9	4	8	4	9
Raymond	92	8	7	10	8	7	4	9	7	8	11	6	7
DIVISION No. 3—BOW	310	27	30	21	32	29	24	28	20	30	22	24	23
Rural	292	24	27	20	29	28	23	27	18	29	21	24	22
Urban	18	3	3	1	3	1	1	1	2	1	1	—	1
Town of Redcliff	18	3	3	1	3	1	1	1	2	1	1	—	1
DIVISION No. 4—NANTON	414	36	34	40	39	32	35	36	41	24	35	34	28
Rural	286	25	25	27	25	24	27	24	25	18	23	19	24
Urban	128	11	9	13	14	8	8	12	16	6	12	15	4
Town of High River	128	11	9	13	14	8	8	12	16	6	12	15	4
DIVISION No. 5—ACADIA	394	32	37	44	27	36	33	31	34	36	22	26	36
Rural	18	18	22	28	14	25	26	17	25	22	16	17	25
Urban	139	14	15	16	13	11	7	14	9	14	6	9	11
Town of Hanna	139	14	15	16	13	11	7	14	9	14	6	9	11

VITAL STATISTICS BRANCH

TABLE 2.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) BY MONTHS, CLASSIFIED AS RURAL AND URBAN, BY DIVISIONS, ALBERTA, 1931—Continued.

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
DIVISION No. 6—CALGARY	2964	264	214	252	265	250	262	271	255	248	231	209	243
Rural	704	59	51	60	65	59	52	76	61	63	51	40	67
Urban	2260	205	163	192	200	191	210	195	194	185	180	169	176
City of Calgary	1885	168	140	152	167	159	177	164	158	154	157	137	152
Drumheller	276	28	19	32	22	25	23	21	27	18	20	23	18
Town of Olds.....	99	9	4	8	11	7	10	10	9	13	8	9	6
DIVISION No. 7—BATTLE RIVER	808	53	51	73	81	58	59	74	78	76	69	65	71
Rural	733	50	47	60	73	52	54	67	73	68	64	61	64
Urban	75	3	4	13	8	6	5	7	5	8	5	4	7
Town of Wainwright													
DIVISION No. 8—RED DEER	1276	117	90	124	106	122	98	95	109	124	99	101	91
Rural	645	53	36	62	58	57	60	47	45	71	43	57	56
Urban	631	64	54	62	48	65	38	48	64	53	56	44	35
City of Red Deer	101	10	9	11	7	10	9	8	11	13	10	2	5
Wetaskiwin	114	16	7	8	10	15	6	8	7	13	10	8	6
Town of Camrose	103	13	8	12	11	8	2	14	9	8	7	8	3
Innisfail	126	13	8	12	4	13	7	10	14	12	12	9	12
Lacombe	93	8	9	8	8	10	7	5	12	5	11	5	5
Stettler	94	4	13	11	8	9	7	3	11	6	6	12	4
DIVISION No. 9—ROCKY MOUNTAIN HOUSE	403	28	30	34	40	38	36	31	31	34	40	33	28
Rural	403	28	30	34	40	38	36	31	31	34	40	33	28
DIVISION No. 10—VICTORIA	1478	148	97	126	125	116	123	118	114	142	123	124	122
Rural	1141	113	70	100	103	80	96	88	92	115	87	100	97
Urban	337	35	27	26	22	36	27	30	22	27	36	24	25
Town of Vegreville	216	19	15	15	12	23	16	19	13	18	23	18	17
Vermilion	121	12	8	11	10	13	11	11	9	9	13	6	8
DIVISION No. 11—EDMONTON	3359	284	265	298	261	317	286	292	270	248	280	276	282
Rural	899	78	69	81	69	83	82	85	67	69	79	65	72
Urban	2460	206	196	217	192	234	204	207	207	179	201	211	210
City of Edmonton	2400	204	188	213	189	227	200	201	197	174	197	208	202
Town of Beverly	14	2	4	1	3	3	2	2	1	1	—	—	1
Fort Saskatchewan	46	—	4	3	3	4	4	4	5	5	4	3	7

DIVISION No. 12—EDSON	292	28	15	29	34	26	26	33	29	20	16	14
Rural	223	22	15	21	24	20	14	30	26	16	11	7
Urban	69	5	—	8	10	6	6	3	3	4	5	7
Town of Edson	69	5	—	8	10	6	6	3	3	4	5	7
DIVISION No. 13—BEAVER RIVER	871	61	62	73	71	84	66	85	61	76	71	76
Rural	871	61	62	73	71	84	66	85	61	76	71	76
DIVISION No. 14—STURGEON	1115	78	91	86	114	90	98	107	96	93	89	88
Rural	1115	78	91	86	114	90	98	107	96	93	89	88
DIVISION No. 15—CLEARWATER	419	34	32	35	30	36	37	41	35	35	29	37
Rural	419	34	32	35	30	36	37	41	35	35	29	37
DIVISION No. 16—PEACE RIVER	742	64	73	68	61	78	67	54	56	54	55	50
Rural	566	45	49	49	42	69	53	46	44	40	42	41
Urban	176	19	24	19	19	9	14	8	12	14	13	9
Town of Grande Prairie	176	19	24	19	19	9	14	8	12	14	13	9
DIVISION No. 17—ATHABASCA	194	20	21	27	21	11	19	12	18	7	14	12
Rural	194	20	21	27	21	11	19	12	18	7	14	12

TABLE 3.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) CLASSIFIED AS LEGITIMATE OR ILLEGITIMATE FOR THE PROVINCE AND IN CITIES AND TOWNS OF 5000 POPULATION AND OVER, 1931

Province, Cities and Towns	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total for the Province	17252	8938	8314	16617	8600	8017	635	338	297
Cities and Towns:									
Calgary	1885	963	922	1755	897	858	130	66	64
Edmonton	2400	1262	1138	2148	1128	1020	252	134	118
Lethbridge	572	304	268	563	302	261	9	2	7
Medicine Hat	401	213	188	398	210	188	3	3	—

TABLE 4.—PLURAL BIRTHS CLASSIFIED TO SHOW NUMBER OF CHILDREN BORN ALIVE AND STILLBORN BY SEX, ALBERTA, 1931

Classification of Births	Total
CASES OF TWINS	266
Two males (both living)	72
One male and one female (both living)	78
Two females (both living)	90
One male living and one male stillborn	10
One male living and one female stillborn	5
One male stillborn and one female living	4
One female living and one female stillborn	2
Two males (both stillborn)	3
One male and one female (both stillborn)	1
Two females (both stillborn)	1
CASES OF TRIPLETS	3
One male and two females (all living)	1
Two females living and one female stillborn	2
Total multiple births	Number 541
	Male 259
	Female 282
Total single living births	Number 16744
	Male 8700
	Female 8044
Total single stillbirths	Number 420
	Male 257
	Female 163
Total confinements	17433

VITAL STATISTICS BRANCH

TABLE 5.—BIRTHS (EXCLUSIVE OF STILLBIRTHS), CLASSIFIED ACCORDING TO BIRTHPLACE OF PARENTS, FOR ALBERTA, 1931—Continued

Birthplace of Father	Birthplace of Mother																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	P.E. Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Prov. not specified	England	Ireland	Scotland	Wales	Other	Newfoundland	Other	Austria	Belgium	Denmark	Finland	France	Germany	Holland	Hungary	Italy	Norway				Poland	Roumania	Russia	Sweden	Other	China	Japan	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Total	184	94	245	1514	410	1122	187	348	68	35	23	10	2904	10	19	13	52	229	104	82	670	33	2	170	19	71	14	1	4	6	7	8	5	27	3	2	37	11	10	57	19	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 8--TOTAL BIRTHS (EXCLUSIVE OF STILLBIRTHS) AND BIRTHS IN PUBLIC INSTITUTIONS SHOWING THE NUMBER OF MOTHERS NON-RESIDENT IN THE PROVINCE OF ALBERTA, 1931

	All Births		In Public Institutions	
	Total	Births to Mothers Non-resident in Province	Total	Births to Mothers Non-resident in Province
Total for Province	17,252	167	8,240	129

TABLE 9—BIRTHS (EXCLUSIVE OF STILLBIRTHS) TO RESIDENT AND NON-RESIDENT MOTHERS AND BIRTHS IN PUBLIC INSTITUTIONS IN CITIES OF 5,000 POPULATION AND OVER, ALBERTA, 1931

Cities	All Births			Births in Public Institutions			Births elsewhere than in Public Institutions			
	Total	To Resident Mothers	To mothers non-resident in city where birth occurred and	Total	To Resident Mothers	To mothers non-resident in city where birth occurred and	Total	To Resident Mothers	To mothers non-resident in city where birth occurred and	
			Resident in Province			Non-resident in Province			Resident in Province	Non-resident in Province
Calgary	1185	1565	297	23	1491	278	23	394	875	19
Edmonton	2400	1669	686	45	2079	649	42	321	281	37
Lethbridge	572	311	256	5	462	242	4	110	95	14
Medicine Hat	401	165	203	33	328	182	30	73	49	21

VITAL STATISTICS BRANCH

TABLE 10—ORDER OF BIRTH OF LEGITIMATE CHILDREN BORN IN 1931 (INCLUDING STILLBORN CHILDREN),
BY AGE OF MOTHER

Order of birth of Children	Total	Age of Mother								Age not stated and over					
		Under 15 yrs.	15 years	16 years	17 years	18 years	19 years	20-24 years	25-29 years		30-34 years	35-39 years	40-44 years		
Total	17048	3	1	32	134	375	583	1125	4843	4751	3212	2146	855	89	24
1st child	4402	3	1	31	118	320	395	865	2128	973	303	107	22	6	1
2nd "	3721	—	—	—	—	—	—	221	1561	1214	491	185	36	1	7
3rd "	2607	—	—	1	13	49	158	36	737	1016	512	242	63	3	1
4th "	1803	—	—	—	3	5	28	3	307	678	501	234	76	1	5
5th "	1250	—	—	—	—	—	2	—	75	408	422	240	94	6	2
6th "	977	—	—	—	—	—	—	—	25	252	369	244	77	8	2
7th "	712	—	—	—	—	—	—	—	3	120	246	247	89	7	—
8th "	560	—	—	—	—	—	—	—	4	157	194	195	99	10	1
9th "	340	—	—	—	—	—	—	—	1	16	89	145	80	8	1
10th "	257	—	—	—	—	—	—	—	2	6	43	137	63	6	—
11th "	135	—	—	—	—	—	—	—	—	5	20	68	35	7	—
12th "	115	—	—	—	—	—	—	—	—	3	13	38	52	9	—
13th "	66	—	—	—	—	—	—	—	—	1	4	32	23	6	—
14th "	42	—	—	—	—	—	—	—	—	—	3	14	20	5	—
15th "	25	—	—	—	—	—	—	—	—	—	—	8	13	4	—
16th "	10	—	—	—	—	—	—	—	—	—	—	4	6	—	—
17th "	3	—	—	—	—	—	—	—	—	—	—	1	1	1	—
18th "	3	—	—	—	—	—	—	—	—	—	—	3	—	—	—
19th "	3	—	—	—	—	—	—	—	—	—	1	—	1	1	—
20th "	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21st "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22nd "	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—
23rd "	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24th "	11	—	—	—	—	—	—	—	—	2	1	—	1	—	6
Not stated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 11.—INFANTILE DEATH RATES, ETC., BY DIVISIONS AND CITIES, 1931

Divisions and Cities	Death rate of children under 1 year of age to each 1000 births			Births with or without physician in attendance		Rate of stillborn children to each 1000 births	
	Rate per 1000 births	Number of deaths	Total births	With physician	Without physician	Number of stillbirths	Rate per 1000 births
Division No. 1—Medicine Hat (City of Medicine Hat excepted).....	75.9	24	316	191	125	3	9.5
Division No. 2—Macleod (City of Lethbridge excepted).....	63.9	59	924	730	174	16	17.3
Division No. 3—Bow.....	54.8	17	310	240	70	5	16.1
Division No. 4—Nanton.....	45.9	19	414	392	22	13	31.4
Division No. 5—Acadia.....	81.2	32	394	287	107	8	20.3
Division No. 6—Calgary (City of Calgary and City of Drumheller excepted).....	80.9	65	803	634	169	19	23.7
Division No. 7—Battle River.....	52.0	42	808	730	78	25	30.9
Division No. 8—Red Deer (Cities of Red Deer and Wetaskiwin excepted).....	69.7	74	1061	849	212	40	37.7
Division No. 9—Rocky Mountain.....	67.0	27	403	315	88	8	19.9
Division No. 10—Victoria.....	69.7	103	1478	810	668	35	23.7
Division No. 11—Edmonton (City of Edmonton excepted).....	75.1	72	929	537	422	24	25.0
Division No. 12—Edson.....	75.3	22	232	156	136	6	20.5
Division No. 13—Beaver River.....	113.7	99	871	323	548	18	20.7
Division No. 14—Sturgeon.....	84.3	94	1115	513	602	26	23.3
Division No. 15—Clearwater.....	121.7	51	419	208	211	14	33.4
Division No. 16—Peace River.....	75.5	56	742	437	305	14	18.9
Division No. 17—Athabasca.....	56.7	11	194	99	155	6	30.9
City of Edmonton.....	60.8	146	2400	2375	25	68	28.3
City of Calgary.....	43.5	82	1885	1857	28	68	36.1
City of Lethbridge.....	85.7	49	572	547	25	18	31.5
City of Medicine Hat.....	57.4	23	401	386	15	6	15.0
City of Red Deer.....	49.5	5	101	100	1	5	43.5
City of Wetaskiwin.....	87.7	10	114	112	2	3	26.3
City of Drumheller.....	54.3	15	276	276	—	5	18.1
Divisions.....	75.4	867	11503	7411	4092	280	24.3
Cities.....	57.4	330	5749	5653	96	173	30.1
Whole Province.....	69.4	1197	17252	13064	4188	453	26.3

VITAL STATISTICS BRANCH

TABLE 12.—DEATHS OF CHILDREN (EXCLUSIVE OF STILLBIRTHS) FROM CERTAIN SPECIFIED CAUSES IN FIRST YEAR OF LIFE BY SEX AND CALENDAR MONTH OF DEATH, 1931

CAUSES OF DEATH		MONTH OF DEATH												Total under 1 year											
		January		February		March		April		May		June		July		August		September		October		November		December	
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
Total	Male	Female	61	61	66	43	80	52	65	72	49	54	33	39	35	51	34	44	33	48	39	37	44	58	34
ALL CAUSES	1197	675	522	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7 Measles	23	11	12	1	1	2	1	2	1	1	—	2	2	—	—	1	2	—	—	—	1	—	1	2	1
8 Scarlet Fever	2	2	2	1	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9 Whooping-cough	59	41	18	4	2	9	10	7	5	4	1	2	1	—	1	2	—	—	—	2	—	—	—	2	2
10 Diphtheria	8	1	2	1	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
11 Influenza	3	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12 Dysentery	8	5	3	1	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13 Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15 Polioencephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16 Polioencephalitis	21	15	6	1	2	2	1	1	—	2	1	2	1	—	1	3	—	—	—	1	1	1	—	—	—
18 Epidemic cerebrospinal meningitis	6	3	3	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
23 Tuberculosis of the respiratory system	3	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24 Tuberculosis of the meninges and central nervous system	4	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25-32 Tuberculosis, other forms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34 Syphilis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36 Purulent infection, septicaemia	1	—	1	1	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
67 Diseases of the thymus gland	6	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
79 Simple meningitis	3	1	2	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
86 Convulsions	13	8	5	1	1	1	1	1	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
89 Diseases of the ear and mastoid process	3	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
105a Croup	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
106 Bronchitis	13	10	3	3	3	3	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
107 Bronchopneumonia	119	65	54	12	6	10	11	10	9	4	6	1	1	3	2	3	2	2	1	3	3	5	2	5	4
108, 109 Pneumonia	58	33	25	3	3	2	1	5	6	6	2	1	1	1	1	—	—	—	—	—	—	—	—	—	—
115 Diseases of the buccal cavity and annæa and of the pharynx and tonsils (including adenoid vegetations)	4	2	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
116-118 Diseases of the stomach	3	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
119 Diarrhoea and enteritis	141	92	49	5	4	8	7	5	7	3	6	1	7	4	6	3	12	5	16	8	11	4	2	6	7
122 Hernia, intestinal obstruction	7	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
130 Nephritis	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
157 Malformations	97	53	44	3	3	6	1	6	4	9	4	4	5	3	3	2	3	2	6	3	1	6	1	8	9
(a) Congenital hydrocephalus	10	5	5	—	—	3	—	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Congenital malformations of the heart	43	26	17	3	2	2	2	2	4	3	1	2	4	3	1	—	—	—	—	—	—	—	—	—	—
(b, d, e) Others under this title	44	22	22	1	1	1	1	4	4	3	1	2	4	2	2	3	2	2	2	1	2	1	2	1	5
158 Congenital debility	73	35	38	2	5	3	2	1	3	2	7	4	4	2	3	2	3	3	3	3	6	1	3	3	3

VITAL STATISTICS BRANCH

TABLE 14.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN PUBLIC INSTITUTIONS OF CHILDREN UNDER 1 YEAR OF AGE, CLASSIFIED ACCORDING TO RESIDENCE OF DECEDENTS IN CITIES OF 5,000 POPULATION AND OVER, 1931.

Cities	All Deaths under one year						Deaths in Public Institutions						Deaths elsewhere than in Public Institutions					
	Total			Residents			Non-resident in city where death occurred and			Total			Residents			Non-resident in city where death occurred and		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Calgary	82	47	35	68	38	30	14	9	5	—	—	—	—	—	—	—	—	—
Edmonton	146	84	62	107	63	44	39	21	18	—	—	—	—	—	—	—	—	—
Lethbridge	49	25	24	39	19	20	10	6	4	—	—	—	—	—	—	—	—	—
Medicine Hat	23	16	7	12	10	2	11	6	5	—	—	—	—	—	—	—	—	—
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	34	17	17	32	17	15	12	9	3	—	—	—	—	—	—	—	—	—
	28	19	9	26	18	8	2	1	—	—	—	—	—	—	—	—	—	—
	14	6	8	14	6	8	—	—	—	—	—	—	—	—	—	—	—	—
	7	5	2	6	5	1	10	6	4	—	—	—	—	—	—	—	—	—

TABLE 15.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN PUBLIC INSTITUTIONS OF CHILDREN UNDER 1 YEAR OF AGE, SHOWING THE NUMBER NON-RESIDENT IN THE PROVINCE OF ALBERTA, 1931.

	All Deaths under one year						In Public Institutions					
	Total			Non-resident in Province			Total			Non-resident in Province		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total for Province	1197	675	522	4	2	2	454	252	202	2	2	—

TABLE 16—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), 1931—TRANSFERRED TO REGULAR RESIDENCE OF DECEASED

DIVISION No. 1—MEDICINE HAT

Municipality No.	Population, 1931	Number of Births	Birth Rate per 1,000 population	Number of Deaths	Death Rate per 1,000 population	Number of Deaths (Under 1 year)	Infant Mortality Rate (per 1,000 births)	Stillbirths	Typhoid and paratyphoid	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Acute poliomyelitis	Meningococcal Meningitis	Pulmonary tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (Suicides excepted)	
1	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	128	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	526	7	13	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	1097	26	24	6	5	1	42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	678	36	53	2	3	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32	580	16	28	4	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
33	477	15	31	5	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34	793	22	28	11	14	2	91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35	307	5	16	2	7	1	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36	1214	46	38	12	10	2	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61	808	14	17	4	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
62	684	19	28	6	9	2	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63	570	5	9	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64	1060	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65	1148	18	16	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
66	2082	110	53	26	12	8	74	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
91	1115	65	58	14	12	5	77	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
92	905	35	39	19	21	5	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
93	852	24	28	7	8	2	83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
94	605	39	64	9	15	3	79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15909	502	31.5	135	8.5	31	61.7	4	1	—	—	2	—	4	—	1	—	—	—	10	1	—	5	16	13	11	5	—	3	7	3	8
Death Rate per 100,000 population.....		6	—	13	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63	6	—	31	101	82	69	31	—	19	44	19	50

[illegible]

DIVISION No. 4—NANTON

[illegible]

VITAL STATISTICS BRANCH

TABLE 16.—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), 1931—TRANSFERRED TO REGULAR RESIDENCE OF DECEASED—Continued

DIVISION No. 5—ACADIA

Municipality No.	Population, 1931	Number of Births	Birth Rate per 1,000 population	Number of Deaths	Death Rate per 1,000 population	Number of Deaths (Under 1 year)	Infant Mortality Rate (per 1,000 births)	Stillbirths	Typhoid and paratyphoid	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Acute poliomyelitis	Meningococcic Meningitis	Pulmonary tuberculosis	Tuberculosis (all forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of the Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (Suicides excepted)	
212	697	15	21	4	6	1	71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
213	398	9	23	4	10	1	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
214	581	7	12	6	10	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
215	316	2	6	1	3	2	133	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
241	1029	15	14	3	3	2	128	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
242	1103	43	39	13	12	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
243	807	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
244	704	26	37	6	9	1	38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
245	613	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
246	1180	12	10	5	4	1	88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
271	1186	19	16	3	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
272	1227	39	32	9	7	3	77	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
273	740	29	39	9	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
274	788	16	20	7	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
275	1189	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
277	2178	19	9	7	3	1	53	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
301	814	2	2	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
302	941	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
303	1199	12	10	2	2	1	83	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
304	796	12	5	5	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
305	1482	93	63	30	20	10	109	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
306	1651	52	31	19	12	3	58	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
307	1446	32	22	8	5	1	31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	23065	455	19.7	145	6.3	32	70.3	12	1	—	—	1	2	8	—	—	—	2	3	15	—	1	3	13	13	13	1	—	3	5	2	10
Death Rate per 100,000 population				4	—	—	—	—	—	—	—	4	9	34	—	—	—	9	13	65	—	4	13	56	56	56	4	—	13	21	9	43

[illegible]

DIVISION No. 9—ROCKY MOUNTAIN HOUSE

[illegible]

DIVISION No. 10—VICTORIA

[illegible]

TABLE 16—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), 1931—TRANSFERRED TO REGULAR RESIDENCE OF DECEASED—Continued

DIVISION No. 10—VICTORIA—Continued

Municipality No.	Population, 1931	Number of Births	Birth Rate per 1,000 population	Number of Deaths	Death Rate per 1,000 population	Number of Deaths (Under 1 year)	Infant Mortality Rate (per 1,000 births)	Stillbirths	Typhoid and paratyphoid	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Acute poliomyelitis	Meningococcal Meningitis	Pulmonary tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (Suicides excepted)	
512	3035	90	30	18	6	3	34	2	—	—	—	1	—	2	—	—	—	—	—	5	—	1	2	1	—	—	—	—	—	—	1	—
513	3245	114	35	22	7	7	61	3	—	—	—	—	—	1	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
514	3826	74	22	17	5	2	27	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—
515	3201	171	53	39	12	8	47	4	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
516	3454	189	54	53	15	15	81	3	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—
545	4100	146	36	36	9	12	83	5	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
546	4584	143	31	29	6	15	106	3	—	—	—	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
547	3725	137	37	44	12	15	110	3	—	—	—	2	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—
Total	50113	1560	31.1	370	7.5	98	62.8	41	3	1	1	5	6	15	1	—	13	6	40	—	4	8	39	9	25	13	1	7	12	5	17	
Death Rate per 100,000 population.....																																
									6	2	2	10	12	30	2	—	26	12	80	—	—	8	16	76	18	50	26	2	14	24	10	34

DIVISION No. 11—EDMONTON

487	2753	114	41	39	14	11	99	5	—	—	—	—	—	3	—	—	—	—	—	—	—	—	1	6	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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DIVISION No. 12—EDSON

[illegible]

DIVISION No. 13—BEAVER RIVER

[illegible]

TABLE 16—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), 1931—TRANSFERRED TO REGULAR RESIDENCE OF DECEASED—Continued

DIVISION No. 13—BEAVER RIVER—Continued

Municipality No.	Population, 1931	Number of Births	Birth Rate per 1,000 population	Number of Deaths	Death Rate per 1,000 population	Number of Deaths (Under 1 year)	Infant Mortality Rate (per 1,000 births)	Stillbirths	Typhoid and paratyphoid	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Acute poliomyelitis	Meningococcic Meningitis	Pulmonary tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicioua Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (Suicides excepted)	
633	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
634	186	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
635	568	11	19	8	14	2	182	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
661	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
663	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
664	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
666	320	5	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
695	218	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total.....	21849	752	34.4	182	8.3	60	79.8	13	1	1	—	1	—	8	—	—	11	1	16	2	—	—	1	8	5	17	4	1	2	7	6	12
Death Rate per 100,000 population..	.....	.....	.....	.....	.....	.....	.....	.....	5	5	—	5	—	37	—	—	50	5	73	9	—	—	5	37	23	78	18	5	9	32	27	55

DIVISION NO. 14—STURGEON

576	4268	142	33	42	10	18	128	4	—	—	—	—	—	2	—	—	1	—	—	—	—	—	1	1	—	3	3	—	—	—	—	—
577	4919	248	50	53	11	15	61	2	—	—	—	—	—	4	—	—	1	—	—	—	—	—	1	6	—	13	1	1	2	—	—	—
578	3286	43	13	13	4	4	2	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
579	3438	165	48	42	12	9	55	5	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	9	—	3	—	—	—	—	—	—
580	2444	66	27	20	8	2	30	2	—	—	—	—	—	1	—	—	4	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—
581	1684	43	26	4	2	2	49	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
606	131	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
607	887	41	46	10	11	5	122</																									

[illegible]

DIVISION No. 15—CLEARWATER

[illegible]

[illegible]

DIVISION No. 17—ATHABASCA

[illegible]

See continuation of table on next page for cities.

VITAL STATISTICS BRANCH

TABLE 16—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), 1931—TRANSFERRED TO REGULAR RESIDENCE OF DECEASED—Continued

CITIES

Cities	Population, 1931	Number of Births	Rate per 1,000 population	Number of deaths	Rate per 1,000 population	No. of Deaths (under 1 year of age)	Infantile Mortality Rate (per 1,000 births)	Stillbirths	Typhoid and paratyphoid	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Acute poliomyelitis	Meningococcal Meningitis	Pulmonary tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (Suicides excepted)
Edmonton	79197	1680	21.2	533	6.7	105	62.5	53	—	—	1	—	1	25	1	2	20	4	54	3	4	15	62	41	27	16	—	16	24	6	32
Death Rate per 100,000 population..											1	—	1	32	1	3	25	5	68	4	5	19	78	52	34	22	—	22	30	7	40
Calgary	83761	1586	18.9	609	7.3	69	43.5	66	1	—	—	1	4	9	—	1	22	8	62	10	4	10	85	57	41	8	2	9	30	5	40
Death Rate per 100,000 population..									1	—	—	1	5	11	—	1	26	10	74	12	5	12	101	68	49	10	3	11	36	6	48
Drumheller	2987	115	38.5	34	11.4	9	78.2	1	1	—	—	1	—	3	—	—	—	—	1	1	1	—	5	—	1	1	—	1	1	1	5
Death Rate per 100,000 population..									33	—	—	33	—	100	—	—	—	—	33	33	33	—	167	—	33	33	—	33	33	33	167
Lethbridge	13489	327	24.2	119	8.8	49	122.3	12	1	—	—	—	—	1	—	—	4	—	9	3	—	2	13	3	22	4	—	3	—	3	10
Death Rate per 100,000 population..									7	—	—	—	—	7	—	—	29	—	67	22	—	15	96	22	—	29	—	22	—	22	74
Medicine Hat	10300	164	15.9	93	9.0	13	79.2	2	—	2	—	—	1	1	—	—	1	—	15	—	—	4	17	13	6	3	—	1	3	3	6
Death Rate per 100,000 population..									—	19	—	—	10	10	—	—	10	—	146	—	—	39	165	126	58	29	—	10	29	29	58
Red Deer	2344	63	26.8	29	12.4	4	63.5	3	—	—	—	—	1	1	—	—	1	—	4	—	—	—	3	4	2	—	—	2	—	—	—
Death Rate per 100,000 population..									—	—	—	—	43	43	—	—	43	—	171	—	—	—	128	171	85	—	—	85	—	—	—
Wetaskiwin	2125	66	31.1	38	17.8	5	75.7	2	—	—	—	—	—	3	—	—	—	—	3	1	—	—	5	7	—	—	—	1	1	—	2
Death Rate per 100,000 population..									—	—	—	—	—	141	—	—	—	—	141	47	—	—	235	329	—	—	—	47	47	—	94

[illegible]

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CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE

[illegible]

	(a) With record of caesarean operation	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1</
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[illegible]

SPECIAL CLASSES OF ACCIDENTAL DEATHS (INCLUDED IN THE PRECEDING TABLE). ALBERTA, 1931

[illegible]

TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITIONS AND NATIVITY, FOR THE WHOLE PROVINCE, 1931

CAUSES OF DEATH		Conjugal Condition										Nativity						
		Total	Single					Married			Widowed	Not stated	Canada	British	U.S.A.	Others	Not Stated	
			Under 15 yrs.					15-24 years	25-44 years	45-64 years								65 years and over
			15-24 years	25-44 years	45-64 years	65 years and over	Not Stated											
DEATHS—ALL CAUSES	Total	5302	1724	257	188	182	128	1	57	500	832	647	786	2994	811	534	933	30
	Male	3095	951	175	160	161	112	1	6	229	493	453	354	1678	491	331	569	26
	Female	2207	773	82	28	21	16	—	51	271	339	194	432	1316	320	203	364	4
CLASS I.—INFECTIOUS AND PARASITIC DISEASES	Total	751	305	78	38	21	6	—	23	81	36	54	517	69	50	111	4	4
1 Typhoid fever	Male	428	167	46	31	18	6	—	22	49	53	27	29	287	40	32	65	4
2 Paratyphoid fever	Female ..	323	138	32	7	3	—	—	21	60	28	9	25	230	29	18	46	—
	Male	11	1	3	1	—	—	—	1	4	—	—	1	7	1	3	—	—
	Female	5	—	—	—	—	—	—	2	3	—	—	—	1	1	2	—	—
6 Smallpox	Male	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7 Measles	Male	7	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	4	4	—	—	—	—	—	1	—	—	—	—	5	—	—	2	—
8 Scarlet fever	Male	4	3	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—
	Female	15	15	—	—	—	—	—	1	—	—	—	—	15	—	—	—	—
9 Whooping-cough	Male	17	17	—	—	—	—	—	—	—	—	—	—	17	—	—	—	—
	Female	11	10	—	—	—	—	—	—	—	—	—	—	11	—	—	—	—
10 Diphtheria	Male	14	11	2	—	—	—	—	—	—	—	—	—	12	—	—	—	—
	Female	11	11	—	—	—	—	—	1	—	—	—	—	11	—	—	—	—
11 Influenza	Male	110	54	5	1	2	2	—	8	14	15	9	78	13	7	12	—	—
	Female	76	33	2	1	2	—	1	9	11	3	14	45	13	9	9	—	—
(a) Sole cause	Male	15	10	1	—	—	—	—	—	—	2	2	3	13	1	—	—	—
	Female	8	5	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—
(b) With bronchitis	Male	5	1	—	—	—	—	—	—	—	2	2	—	4	—	—	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) With pneumonia	Male	43	29	1	—	—	—	—	3	6	4	1	1	33	5	3	2	—
	Female	33	17	1	—	—	—	—	8	4	1	2	1	21	7	3	2	—
(d) With other respiratory diseases	Male	7	2	—	—	—	—	—	—	—	—	—	—	4	1	—	—	—
	Female	2	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
(e) With intestinal complications	Male	8	2	—	—	—	—	—	—	—	1	1	3	3	2	1	—	—
	Female ..	7	3	—	—	—	—	—	1	—	—	—	—	5	2	1	—	—

(f) With other causes		Male	Female	32	10	3	1	1	1	5	4	6	2	21	4	3	4	—
13	Dysentery	Male	Female	25	7	1	1	—	—	1	6	2	6	12	4	4	5	—
15	Erysipelas	Male	Female	4	2	—	—	—	—	1	—	—	—	6	—	—	1	—
16	Poliomyelitis and polioencephalitis (acute)	Male	Female	8	7	1	—	—	—	—	—	—	1	8	—	—	—	—
17	Epidemic or lethargic encephalitis	Male	Female	6	3	2	—	—	—	—	—	2	2	4	2	—	1	—
18	Epidemic cerebrospinal meningitis	Male	Female	1	1	—	1	1	—	—	1	—	1	1	—	—	—	—
21	Rabies	Male	Female	3	1	—	—	—	—	2	1	—	—	4	—	—	—	—
22	Tetanus	Male	Female	6	4	—	—	—	—	1	—	—	—	5	—	—	1	—
23-32	Tuberculosis	Male	Female	1	1	—	—	—	—	1	—	—	—	1	—	—	—	—
23	Tuberculosis of the respiratory system	Male	Female	213	60	35	23	11	3	35	25	9	10	130	21	17	42	3
24	Tuberculosis of the meninges and central nervous system	Male	Female	169	51	26	6	1	—	41	11	6	9	122	12	7	28	—
25	Tuberculosis of the intestines and peritoneum	Male	Female	171	41	29	19	8	3	33	21	9	6	106	16	14	32	3
26	Tuberculosis of the vertebral column	Male	Female	135	35	20	5	1	—	35	10	6	8	95	10	5	25	—
27b	Tuberculosis of the joints (vertebral column excepted)	Male	Female	17	13	1	2	—	—	1	1	—	—	13	2	—	—	—
28	Tuberculosis of the skin and sub-cutaneous cellular tissue	Male	Female	16	12	3	1	—	—	1	—	—	—	13	—	—	—	—
29	Tuberculosis of the lymphatic system (mesenteric, retro-peritoneal and bronchial glands excepted)	Male	Female	7	8	2	1	—	—	2	1	—	—	4	1	—	—	—
30	Tuberculosis of the genito-urinary system	Male	Female	2	1	—	—	—	—	1	—	—	—	1	—	—	—	—
31	Tuberculosis of other organs	Male	Female	6	—	1	1	1	—	2	—	—	3	1	1	—	—	—
32	(a) Disseminated tuberculosis, acute	Male	Female	2	1	—	—	—	—	—	—	—	1	—	—	—	—	—
	(b) Disseminated tuberculosis, chronic	Male	Female	3	2	—	—	1	—	—	—	—	—	3	—	—	—	—
	(c) Disseminated tuberculosis, not specified	Male	Female	4	2	—	—	—	—	1	—	—	—	4	—	—	—	—
34	Syphilis	Male	Female	2	—	1	—	—	—	—	—	—	—	1	—	—	—	—
35	Gonococcus infection and other venereal diseases	Male	Female	1	4	—	2	3	—	—	2	1	2	1	1	—	1	—
36	Purulent infection, septicaemia (non-puerperal)	Male	Female	19	3	—	—	—	—	—	7	1	—	1	1	5	3	1
39	Other diseases due to protozoal parasites	Male	Female	2	—	—	—	—	—	2	—	—	—	2	—	—	—	—
		Male	Female	3	1	—	—	—	—	1	—	—	—	2	—	—	—	—
		Male	Female	1	—	—	—	—	—	2	—	—	—	2	—	—	—	—
		Male	Female	3	1	—	—	—	—	1	—	—	—	4	2	1	2	—
		Male	Female	1	—	—	—	—	—	2	—	—	—	1	1	1	1	—
		Male	Female	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—

TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITIONS AND NATIVITY, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	Conjugal Condition							Nativity									
		Under 15 yrs.	Single				Married			Canada	British	U.S.A.	Others	Not Stated				
			15-24 years	25-44 years	45-64 years	65 years and over	Not Stated	15-24 years	25-44 years						45-64 years	65 years and over	Widowed	Not stated
43 Mycoses	4	1	—	1	1	—	—	—	—	—	—	—	—	—	2			
44 (a) Chicken-pox	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1			
(b) German measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
(c) Other infectious or parasitic diseases.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
CLASS II.—CANCER AND OTHER TUMOURS																		
45-53 Cancer and other malignant tumours... .. Total	473	4	8	7	24	16	—	47	166	106	95	118	58	133	4			
45 Cancer of the buccal cavity and pharynx	234	3	6	6	21	14	—	13	67	68	36	53	28	75	4			
46 (a) Of the oesophagus	239	1	2	1	3	2	—	34	99	38	59	86	30	58	—			
(b) Of the stomach and duodenum	228	2	4	6	20	13	—	13	66	68	36	71	27	75	4			
(c) Of the rectum	213	1	2	3	3	2	—	26	88	37	54	55	29	51	—			
(d) Of the liver and biliary ducts	9	—	—	—	—	—	—	—	1	2	3	4	1	1	—			
(e) Of the pancreas	4	—	—	—	—	—	—	—	1	1	1	—	—	—	—			
(f) Of the peritoneum.....	91	—	—	3	13	4	—	5	27	26	18	21	7	43	—			
(g) Of other organs	42	—	—	1	1	1	—	2	14	10	14	14	2	17	—			
47 (a) Of the larynx	14	—	—	1	1	—	—	2	5	4	1	5	1	4	—			
(b) Of the lung	9	—	—	—	2	—	—	2	4	6	1	1	2	2	—			
	10	—	—	—	2	—	—	—	1	6	4	4	1	1	—			
	16	—	—	—	—	—	—	2	5	5	4	8	2	3	—			
	9	—	—	—	—	—	—	—	4	1	3	4	2	2	—			
	4	—	—	—	—	—	—	—	2	—	2	—	—	—	—			
	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—			
	26	1	—	1	2	3	—	1	7	7	4	1	5	6	1			
	29	—	—	—	—	—	—	1	11	9	8	8	3	4	—			
	1	—	—	—	—	—	—	—	1	1	—	1	—	—	—			
	6	—	—	—	—	—	—	—	4	1	1	2	—	—	—			
	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—			

TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITIONS AND NATIVITY, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH		Total	Conjugal Condition										Nativity					
			Under 15 yrs.	Single					Married					Canada	British	U.S.A.	Foreign	
				Not Stated					Widowed									Not stated
				65 years and over					65 years and over									
				15-24 years	25-44 years	45-64 years	65 years and over	Not Stated	15-24 years	25-44 years	45-64 years	65 years and over						
54	Non-malignant tumours	Male	6	1	2	1	1	1	1	1	1	1	4	—	3	2	1	—
		Female	23	—	—	—	—	—	—	—	—	—	—	—	7	9	1	6
	(a) Of the ovary	Female ..	5	—	—	—	—	—	—	—	—	—	—	—	1	3	—	1
	(b) Of the uterus	Female ..	9	—	—	1	—	—	—	—	—	—	—	—	4	3	1	1
	(c) Of other female genital organs	Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(d) Of the brain	Male	2	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—
		Female ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(e) Of the thyroid gland	Male	6	—	—	—	—	—	—	—	—	—	—	—	2	—	—	4
		Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(f) Of the prostate gland	Male	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
	(g) Of other sites	Male	3	—	2	—	—	—	—	—	—	—	—	—	1	2	—	—
		Female ..	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
55	(d) Tumour of the brain, nature not specified.....	Male	3	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1
		Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES			Total	141	37	6	4	5	2	18	37	20	12	—	73	24	20	22
		Male	67	24	4	3	2	1	6	15	8	4	—	41	9	9	6	2
		Female ..	74	13	2	1	3	1	12	22	12	8	—	32	15	11	16	—
56	Acute rheumatic fever	Male	16	10	3	—	1	—	1	1	1	—	—	11	2	2	1	—
		Female ..	9	3	—	—	—	—	2	3	—	—	—	5	1	1	3	—
57	Chronic rheumatism, osteo-arthritis	Male	2	—	—	2	—	—	—	—	—	—	—	—	1	1	—	—
		Female ..	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
59	Diabetes mellitus	Male	23	1	—	1	1	—	—	—	—	—	—	2	1	1	1	—
		Female ..	28	2	—	1	1	—	4	6	7	2	—	10	5	3	5	—
60	Scurvy	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63	Rickets	Male	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female ..	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[illegible]

TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITIONS AND NATIVITY, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Conjugal Condition										Nativity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Total	Under 15 yrs.					Single					Married					Not stated	Canada	British	U.S.A.	Others	Not Stated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		15-24 years					45-64 years					65 years and over											25-44 years					45-64 years					65 years and over																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		15-24 years					25-44 years					45-64 years											65 years and over					15-24 years					25-44 years					45-64 years					65 years and over																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
(a) Delirium tremens	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[illegible]

CLASS VIII.—DISEASES OF THE RESPIRATORY SYSTEM

104	Diseases of the nasal fossae and annexa	Total	522	269	13	13	12	5	—	2	20	51	52	85	350	76	30	65	1
105	(a) Croup	Male	291	141	7	7	9	5	—	—	11	36	34	36	188	46	23	34	—
		Female	231	128	6	1	3	—	—	2	9	15	18	49	162	30	7	31	1
		Male	5	5	—	—	—	—	—	—	—	1	1	—	5	—	—	—	—
		Female	10	7	1	—	—	—	—	—	—	—	—	—	6	1	—	3	—
		Male	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
		Female	3	3	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—
106	(b) Other diseases of the larynx	Male	2	2	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
		Female	13	10	—	—	—	—	—	—	—	—	—	1	11	—	2	—	—
	(a) Bronchitis, acute	Male	4	2	—	—	—	—	—	—	—	—	—	2	4	—	—	—	—
		Female	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
	(b) Bronchitis, chronic	Male	7	2	—	—	—	—	—	—	—	—	—	4	3	—	—	1	—
		Female	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	4	—
	(c) Bronchitis, unspecified	Male	3	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	—
107	(a) Bronchopneumonia	Male	104	70	1	2	3	3	—	—	2	5	7	11	1	—	1	1	—
		Female	99	73	1	1	1	—	—	1	—	—	6	11	83	10	7	4	—
	(b) Capillary bronchitis	Male	1	1	—	—	—	—	—	—	—	—	—	11	83	10	2	4	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
108	Lobar pneumonia	Male	101	24	1	8	2	1	—	—	6	28	16	15	46	26	13	16	—
		Female	54	16	2	—	—	—	—	1	5	5	6	17	27	13	2	11	1
109	Pneumonia, not specified	Male	24	22	—	—	1	—	—	—	1	1	—	—	23	2	—	—	—
		Female	27	20	—	—	—	—	—	—	1	1	1	4	23	1	—	—	—
110	Pleurisy	Male	18	3	5	2	2	—	—	—	1	1	1	—	8	5	1	4	—
		Female	11	4	2	—	—	—	—	—	1	1	1	2	7	3	1	—	—
111	Congestion and haemorrhagic infarct of the lung, etc.	Male	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	9	1	—	—	—	—	—	—	1	2	1	4	1	2	—	—	—
112	Asthma	Male	11	—	—	—	—	—	—	—	1	1	8	3	5	1	—	3	—
		Female	2	—	—	—	—	—	—	—	1	1	—	—	3	2	1	6	—
113	Pulmonary emphysema	Male	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
114	Other diseases of the respiratory system (tuberculosis excepted)	Male	4	2	—	—	—	—	—	—	1	—	1	—	2	1	—	1	—
		Female	3	1	—	—	—	—	—	—	—	—	—	2	1	1	—	—	—
		Total	555	250	24	19	13	8	—	4	71	91	38	37	342	67	56	88	2
		Male	343	153	18	15	11	8	—	—	44	55	24	15	215	40	34	52	2
		Female	212	97	6	4	2	—	—	4	27	36	14	22	127	27	22	36	—

CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM

115	(a) Diseases of the buccal cavity and annexa	Male	6	—	—	—	—	—	—	—	2	2	2	—	—	2	1	1	—
		Female	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Diseases of the tonsils	Male	4	—	1	—	—	—	—	—	2	1	1	—	3	—	1	—	—
		Female	5	2	—	—	—	—	—	1	—	—	—	—	3	—	—	—	—
	(c) Other buccal cavity diseases	Male	7	4	1	1	—	—	—	—	1	1	—	—	5	2	1	—	—
		Female	4	2	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—
116	Diseases of the oesophagus	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
117	(a) Ulcer of the stomach	Male	23	—	1	3	2	3	—	—	3	8	3	—	7	3	4	9	—
		Female	8	—	—	1	—	—	—	—	3	2	—	—	1	2	—	5	—

CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM.		Total	246	15	3	5	12	15	—	1	17	54	67	57	—	90	59	37	60
130	Acute nephritis (including unspecified, under 10 years of age)	Male	154	8	—	3	2	11	13	—	4	34	52	28	—	57	35	26	36
		Female ..	92	7	3	3	1	2	—	—	13	20	15	29	—	33	24	11	24
		Male	12	4	—	1	1	—	—	—	—	3	2	1	—	4	—	2	6
		Female ..	9	4	1	—	—	—	—	—	3	21	22	15	—	6	2	1	—
131	Chronic nephritis	Male	84	4	—	2	6	11	—	—	7	16	12	21	—	35	19	16	14
		Female ..	63	2	2	1	—	2	—	—	8	4	3	2	—	20	14	9	20
132	Nephritis not specified (10 years and over)	Male	12	—	—	—	3	—	—	—	—	—	1	4	—	4	6	1	—
		Female ..	5	—	—	—	—	—	—	—	—	—	1	4	—	1	1	2	—
133	Other diseases of the kidney and annexa.....	Male	7	—	—	—	—	1	—	1	—	1	4	—	—	3	—	2	2
		Female ..	5	1	—	—	—	—	—	—	—	—	2	2	—	1	3	1	—
134	Calculi of the urinary passages	Male	3	—	—	—	—	—	—	—	1	—	1	1	—	3	—	—	—
		Female ..	1	—	—	—	—	—	—	—	1	—	1	—	—	1	2	—	1
135	Diseases of the bladder (tumours excepted)	Male	4	—	—	—	—	—	—	—	—	1	3	—	—	1	—	—	—
		Female ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
136	(a) Stricture of the urethra	Male	1	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—
		Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Other diseases of the urethra	Male	1	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—
		Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
137	Diseases of the prostate	Male	29	—	—	—	1	1	—	—	—	4	14	9	—	7	6	5	11
138	Diseases of the male genital organs (not specified as venereal)	Male	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—
139	(a) Diseases of the ovary, Fallopian tube and parametrium ..	Female ..	1	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—
	(b) Diseases of the uterus	Female ..	6	—	—	1	1	—	—	1	1	3	—	—	—	2	3	—	1
	(c) Diseases of the breast	Female ..	1	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
	(d) Other diseases of the female genital organs under this title	Female ..	1	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—
CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE		Total	87	—	2	—	—	—	—	21	62	2	—	—	—	34	16	16	21
140	Abortion with septic conditions	Female ..	15	—	—	—	—	—	—	1	13	1	—	—	—	2	4	4	5
141	Abortion without mention of septic conditions (haemorrhage included)	Female ..	4	—	—	—	—	—	—	1	3	—	—	—	—	2	1	1	—
142	Ectopic gestation	Female ..	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—
144	(a) Placenta praevia	Female ..	4	—	—	—	—	—	—	1	3	—	—	—	—	2	1	—	1
	(b) Other puerperal haemorrhage	Female ..	8	—	—	—	—	—	—	1	7	—	—	—	—	1	—	4	3
145	Puerperal septicaemia (not specified as consequent upon abortion)	Female ..	19	—	1	—	—	—	—	9	9	—	—	—	—	13	3	1	2

TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITIONS AND NATIVITY, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	Conjugal Condition										Nativity					
		Under 15 yrs.	Single				Married				Not stated	Canada	British	Foreign			
			15-24 years	25-44 years	45-64 years	65 years and over	Not Stated	15-24 years	25-44 years	45-64 years				65 years and over	U.S.A.	Others	
																	Not Stated
146 Puerperal albuminuria and eclampsia	Female ..	1	—	—	—	—	—	—	—	4	7	—	—	5	2	1	3
147 Other toxæmias of pregnancy	Female ..	—	—	—	—	—	—	—	—	2	8	—	—	5	2	2	1
148 (a) Puerperal phlegmasia alba dolens and thrombosis.....	Female ..	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
(b) Puerperal embolism	Female ..	—	—	—	—	—	—	—	—	—	2	—	—	—	1	—	—
(c) Puerperal sudden death	Female ..	—	—	—	—	—	—	—	—	—	2	—	—	1	1	—	—
149 Other accidents of childbirth	Female ..	—	1	—	—	—	—	—	—	2	5	—	—	1	1	2	4
(a) Caesarean section	Female ..	—	—	—	—	—	—	—	—	—	2	—	—	—	1	1	—
(b) Dystocia	Female ..	—	1	—	—	—	—	—	—	1	2	—	—	1	—	1	2
(c) Instrumental delivery	Female ..	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
(d) Rupture of uterus in partuition	Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Other accidents of labour	Female ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
150 Other or not specified condition of the puerperal state....	Female ..	—	—	—	—	—	—	—	—	—	2	—	—	1	—	—	1
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE	Total	7	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	Male	4	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	Female ..	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
151 Carbuncle	Female ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
152 Cellulitis, acute abscess	Female ..	2	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
153 Other diseases of the skin and annexa and of the cellular tissue	Male	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female ..	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[illegible]

[illegible]

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931

CAUSES OF DEATH		Total	MONTHS																
			January		February		March		April		May		June	July	August	September	October	November	December
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female							
DEATHS—ALL CAUSES			Total	5302	496	441	485	482	495	432	419	407	385	409	426	425			
		Male	3095	273	263	270	256	297	271	243	237	226	247	246	266				
		Female	2207	223	178	215	226	198	161	176	170	159	162	180	159				
CLASS I.—INFECTIOUS AND PARASITIC DISEASES			Total	751	78	79	100	74	69	62	51	48	49	41	46	54			
1	Typhoid fever	Male	11	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	5	—	—	—	—	—	—	—	—	—	—	—	—	—			
2	Paratyphoid fever	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
6	Smallpox	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
7	Measles	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	7	2	3	—	—	—	—	—	—	—	—	—	—	—			
8	Scarlet fever	Male	4	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	4	—	—	—	—	—	—	—	—	—	—	—	—	—			
9	Whooping-cough	Male	15	1	2	3	1	1	—	—	—	—	—	—	—	—			
		Female	17	2	1	1	1	1	—	—	—	—	—	—	—	—			
10	Diphtheria	Male	11	5	2	1	1	1	—	—	—	—	—	—	—	—			
		Female	14	5	1	1	2	2	—	—	—	—	—	—	—	—			
11	Influenza	Male	110	7	15	28	15	14	14	8	1	6	3	6	6	4			
		Female	76	11	7	18	13	10	10	4	2	1	4	1	1	4			
(a)	Sole cause	Male	15	—	2	3	3	2	2	2	—	—	—	—	—	—			
		Female	8	1	1	1	1	1	—	—	—	—	—	—	—	—			
(b)	With bronchitis	Male	5	1	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—			
(c)	With pneumonia	Male	43	4	8	14	5	5	5	1	—	—	—	—	—	—			
		Female	33	7	4	9	7	2	2	3	—	—	—	—	—	—			
(d)	With other respiratory diseases	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female	2	—	—	—	—	—	—	—	—	—	—	—	—	—			
(e)	With intestinal complications	Male	8	1	2	1	1	—	—	—	—	—	—	—	—	—			
		Female	7	2	1	2	6	—	—	—	—	—	—	—	—	—			
(f)	With other causes	Male	32	1	2	6	4	5	5	5	1	1	1	1	1	3			
		Female	25	1	3	4	4	4	6	1	1	1	3	1	1	2			

VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
		Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...	Male ... Female ...
13 Dysentery	4	—	—	—	—	1	1	—	—	2	1	—	—
15 Erysipelas	7	2	1	—	—	1	—	2	—	1	—	—	—
16 Poliomyelitis and polioencephalitis (acute)	6	2	—	1	—	—	1	—	—	—	—	1	—
17 Epidemic or lethargic encephalitis	7	—	—	—	—	—	—	—	—	2	1	—	—
18 Epidemic or lethargic encephalitis	6	—	—	—	—	2	1	—	—	—	—	—	—
17 Epidemic or lethargic encephalitis	1	—	—	—	—	—	—	—	—	—	—	—	—
18 Epidemic cerebrospinal meningitis	3	1	—	—	—	1	—	—	—	1	—	—	—
21 Rabies	6	1	—	2	1	—	—	—	—	—	—	—	—
22 Tetanus	1	—	—	—	—	—	—	—	—	—	—	—	—
23 Tuberculosis	1	—	—	—	—	—	—	1	—	—	—	—	—
23-32 Tuberculosis	213	21	25	12	16	20	23	21	16	15	13	13	18
23 Tuberculosis of the respiratory system	169	15	18	12	16	15	9	14	11	9	12	17	12
23 Tuberculosis of the meninges and central nervous system	171	15	24	21	16	18	16	18	14	10	12	17	11
24 Tuberculosis of the meninges and peritoneum	135	14	14	20	15	11	5	11	7	5	11	14	8
24 Tuberculosis of the meninges and central nervous system	17	2	—	1	—	1	4	1	1	1	2	1	3
25 Tuberculosis of the intestines and peritoneum	16	—	2	1	—	1	2	2	2	2	1	3	—
26 Tuberculosis of the vertebral column	7	1	1	1	—	—	2	—	—	—	—	—	—
26 Tuberculosis of the vertebral column	7	1	1	1	—	3	2	1	1	—	—	—	—
27b Tuberculosis of the joints (vertebral column excepted)	2	1	—	—	1	—	—	—	—	—	—	—	—
28 Tuberculosis of the skin and sub-cutaneous cellular tissue	1	—	—	—	—	—	—	—	—	—	—	—	—
29 Tuberculosis of the lymphatic system (mesenteric, retro-peritoneal and bronchial glands excepted)	—	—	—	—	—	—	—	—	—	—	—	—	—
29 Tuberculosis of the lymphatic system (mesenteric, retro-peritoneal and bronchial glands excepted)	2	—	—	—	—	—	1	—	—	—	—	—	1
30 Tuberculosis of the genito-urinary system	—	—	—	—	—	—	—	—	—	—	—	—	—
30 Tuberculosis of the genito-urinary system	6	—	—	1	1	—	1	—	1	2	—	—	—
31 Tuberculosis of other organs	2	—	—	—	—	—	—	—	—	1	—	—	—
31 Tuberculosis of other organs	2	—	—	—	—	—	—	—	—	—	—	—	—
32 (a) Disseminated tuberculosis, acute	3	—	—	—	—	—	—	—	—	—	—	—	1
32 (a) Disseminated tuberculosis, acute	4	1	1	1	—	—	—	—	1	—	1	—	2

[illegible]

VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
(b) Of the cervix uteri	7	—	—	—	—	2	—	1	—	1	—	2	1
49 Cancer of other female genital organs	6	—	—	—	—	2	1	—	—	2	1	—	—
50 Cancer of the breast	43	7	6	1	4	3	—	3	6	2	5	1	5
51 (a) Of the bladder	7	2	1	—	1	—	1	1	—	1	—	—	—
(b) Of the kidney	7	—	1	—	—	—	1	1	1	—	1	1	1
(c) Of the prostate gland	11	1	1	3	—	1	—	1	1	1	—	1	1
(d) Of the testicle	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Of other male genito-urinary organs	—	—	—	—	—	—	—	—	—	—	—	—	—
52 Cancer of the skin	5	—	—	—	—	—	1	—	—	1	1	—	—
53 (a) Of the eye and orbit	2	—	—	—	—	—	—	—	1	1	—	1	—
(b) Of the circulatory system (glands excepted)	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Of the lymphatic system	4	—	—	2	—	—	—	—	—	1	—	1	—
(d) Of the female urinary organs	4	—	1	—	1	—	—	—	—	—	1	—	1
(e) Of the bones and joints	3	—	—	—	—	1	1	—	1	—	1	—	—
(f) Of the brain	6	1	—	1	2	1	—	—	—	1	—	—	—
(g) Of the spine and spinal cord	2	1	—	1	—	—	—	1	—	—	—	—	—
(h) Of the neck	2	—	—	2	—	—	—	—	—	—	—	—	—
(i) Of the pelvic viscera	1	1	—	—	—	—	—	—	—	—	—	—	—
	1	—	—	—	—	1	—	—	—	—	—	—	—

[illegible]

CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES

56	Acute rheumatic fever	
57	Chronic rheumatism, osteo-arthritis	
59	Diabetes mellitus	
60	Scurvy	
63	Rickets	
65	Diseases of the pituitary gland	
66	Diseases of the thyroid and parathyroid glands.....	Total
	(a) Simple goitre	
	(b) Exophthalmic goitre	

CLASS V.—CHRONIC POISONINGS AND INTOXICATIONS.																													
Total	Male	Female																											
13	13																												
Male	Male	Female																											
12																													
Male	Male	Female																											
2																													
Male	Male	Female																											
10																													
Male	Male	Female																											
1																													
Male	Male	Female																											
243	136	107																											
Total	Male	Female																											
17	9	8																											
25	16	9																											
21	11	10																											
Male	Male	Female																											
3	3																												
Male	Male	Female																											
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VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
(c) Paralysis agitans	Male ... 2	1	—	—	—	—	—	—	—	—	—	—	1
(d) Disseminated sclerosis	Female ... 2	—	—	—	—	—	—	—	—	—	—	—	—
(e) Others under this title	Male ... 2	—	1	2	—	—	—	1	—	—	1	—	—
88 Diseases of the organs of vision	Female ... 3	—	—	1	—	—	—	—	—	1	—	—	—
(a) Otitis Media	Male ... 1	—	—	—	—	—	—	—	1	—	—	—	—
(b) Mastoid process	Female ... 1	—	—	—	—	—	—	—	—	—	—	—	—
89 (a) Otitis Media	Male ... 3	1	1	—	1	—	—	—	—	—	—	—	—
(b) Mastoid process	Female ... 6	—	2	—	1	2	—	—	—	—	1	—	—
90 (a) Otitis Media	Male ... 3	—	—	—	1	1	—	—	—	—	—	—	—
(b) Mastoid process	Female ... 8	—	—	—	1	1	—	—	—	—	—	—	—
90-95 Diseases of the heart	Total ... 892	80	63	62	70	86	66	75	65	64	75	100	86
(a) Specified as acute	Male ... 548	49	36	39	41	55	36	45	37	38	44	73	55
(b) Unspecified (under 45 years of age)	Female ... 344	31	27	23	29	31	30	30	28	26	31	27	31
91 Acute endocarditis	Total ... 393	32	26	27	28	37	28	34	24	28	31	55	43
(a) Specified as acute	Male ... 244	24	18	14	20	17	25	21	23	13	20	23	26
(b) Unspecified (under 45 years of age)	Female ... 4	1	—	1	1	—	—	—	—	—	1	—	—
92 Chronic endocarditis, valvular diseases	Total ... 81	—	—	—	—	—	—	—	—	—	—	—	—
(a) Specified as acute	Male ... 6	1	—	1	1	1	1	—	1	1	1	1	1
(b) Unspecified (under 45 years of age)	Female ... 6	1	—	—	—	—	—	—	—	—	—	—	—
93 Diseases of the myocardium	Total ... 158	11	10	13	8	12	13	16	10	14	12	25	14
(a) Acute myocarditis	Male ... 105	11	7	7	12	6	11	6	10	6	8	9	12
(b) Endocarditis, unspecified, 45 years and over	Female ... 5	1	—	1	—	—	1	1	1	—	—	3	2
(c) Paralysis agitans	Male ... 2	—	—	—	—	—	—	—	—	—	—	—	—
(d) Disseminated sclerosis	Female ... 5	—	1	2	—	—	—	—	—	—	—	—	—
(e) Others under this title	Male ... 3	—	—	1	—	—	—	—	—	—	—	—	—
88 Diseases of the organs of vision	Female ... 1	—	—	—	—	—	—	—	—	—	—	—	—
(a) Otitis Media	Male ... 1	—	—	—	—	—	—	—	—	—	—	—	—
(b) Mastoid process	Female ... 3	—	2	—	1	2	—	—	—	—	—	—	—
89 (a) Otitis Media	Male ... 3	1	1	—	1	—	—	—	—	—	—	—	—
(b) Mastoid process	Female ... 6	—	2	—	1	2	—	—	—	—	1	—	—
90 (a) Otitis Media	Male ... 3	—	—	—	—	—	—	—	—	—	—	—	—
(b) Mastoid process	Female ... 8	—	—	—	—	—	—	—	—	—	—	—	—
90-95 Diseases of the heart	Total ... 892	80	63	62	70	86	66	75	65	64	75	100	86
(a) Specified as acute	Male ... 548	49	36	39	41	55	36	45	37	38	44	73	55
(b) Unspecified (under 45 years of age)	Female ... 344	31	27	23	29	31	30	30	28	26	31	27	31
91 Acute endocarditis	Total ... 393	32	26	27	28	37	28	34	24	28	31	55	43
(a) Specified as acute	Male ... 244	24	18	14	20	17	25	21	23	13	20	23	26
(b) Unspecified (under 45 years of age)	Female ... 4	1	—	1	1	—	—	—	—	—	1	—	—
92 Chronic endocarditis, valvular diseases	Total ... 81	—	—	—	—	—	—	—	—	—	—	—	—
(a) Specified as acute	Male ... 6	1	—	1	1	1	1	—	1	1	1	1	1
(b) Unspecified (under 45 years of age)	Female ... 6	1	—	—	—	—	—	—	—	—	—	—	—
93 Diseases of the myocardium	Total ... 158	11	10	13	8	12	13	16	10	14	12	25	14
(a) Acute myocarditis	Male ... 105	11	7	7	12	6	11	6	10	6	8	9	12
(b) Endocarditis, unspecified, 45 years and over	Female ... 5	1	—	1	—	—	1	1	1	—	—	3	2

[illegible]

VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS FOR THE WHOLE PROVINCE, 1931.—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
(b) Bronchitis, chronic	Male ... Female ...	1 7	— —	1 1	2 —	1 —	2 —	1 —	— —	— —	— —	— —	— —
(c) Bronchitis, unspecified	Male ... Female ...	3 1	1 —	1 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —
107 (a) Bronchopneumonia	Male ... Female ...	104 99	17 13	13 11	18 14	7 10	7 4	5 7	3 2	5 4	4 5	8 7	6 9
(b) Capillary bronchitis	Male ... Female ...	1 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
108 Lobar pneumonia	Male ... Female ...	15 6	16 3	8 9	11 6	8 5	4 3	1 1	7 6	3 3	11 8	7 6	10 4
109 Pneumonia, not specified	Male ... Female ...	54 24	6 1	9 4	5 4	5 5	3 1	1 1	3 1	3 1	1 3	2 1	4 3
110 Pleurisy	Male ... Female ...	27 18	2 3	1 4	5 2	6 4	3 4	3 —	1 —	1 —	1 —	1 —	2 —
111 Congestion and haemorrhagic infarct of the lung, etc.....	Male ... Female ...	3 9	1 2	1 1	1 2	— —	— —	— —	1 1	— —	— —	— —	1 1
112 Asthma	Male ... Female ...	11 2	3 —	2 —	2 —	2 —	1 —	— —	1 —	2 —	— —	— —	— —
113 Pulmonary emphysema	Male ... Female ...	1 —	— —	— —	1 —	1 —	— —	— —	— —	— —	— —	— —	— —
114 Other diseases of the respiratory system (tuberculosis excepted)	Male ... Female ...	4 3	1 —	— —	— —	— —	1 —	— —	— —	— —	— —	1 1	— —
CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM.....	Total ...	555	54	39	35	49	42	48	61	64	49	38	39
115 (a) Diseases of the buccal cavity and annexa	Male ... Female ...	6 3	1 —	2 —	1 —	2 —	1 —	1 —	— —	— —	— —	— —	— —
(b) Diseases of the tonsils	Male ... Female ...	4 5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
(c) Other buccal cavity diseases	Male ... Female ...	7 4	1 —	1 —	1 —	— —	— —	— —	— —	— —	— —	— —	— —
116 Diseases of the oesophagus	Male ... Female ...	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
117 (a) Ulcer of the stomach	Male ... Female ...	23 8	1 1	2 2	1 1	4 —	2 —	3 —	1 —	1 —	2 —	4 —	2 —

[illegible]

VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
136 (a) Stricture of the urethra	Male ...	—	—	—	—	—	1	—	—	—	—	—	—
(b) Other diseases of the urethra	Female ...	—	—	—	—	—	—	—	—	—	1	—	—
137 Diseases of the prostate	Male ...	3	—	2	—	2	1	4	3	5	4	1	2
138 Diseases of the male genital organs (not specified as venereal)	Male ...	—	—	—	—	—	1	—	—	—	—	—	—
139 (a) Diseases of the ovary, Fallopian tube and parametrium	Female	—	—	—	1	—	—	—	—	—	—	—	—
(b) Diseases of the uterus	Female	1	—	2	—	1	—	1	—	—	—	1	—
(c) Diseases of the breast	Female	—	—	—	—	1	—	—	—	—	—	—	—
(d) Other diseases of the female genital organs under this title	Female	—	—	—	1	—	—	—	—	—	—	—	—
CLASS XI—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE	Total ...	4	6	7	7	12	8	7	8	5	7	7	9
140 Abortion with septic conditions	Female	—	2	2	1	1	1	1	3	—	1	3	—
141 Abortion without mention of septic conditions (haemorrhage included)	Female	—	—	—	—	1	1	—	—	—	—	1	1
142 Ectopic gestation	Female	—	—	—	1	—	—	—	—	—	—	—	—
144 (a) Placenta praevia	Female	—	—	—	—	—	—	—	—	1	1	—	2
(b) Other puerperal haemorrhage	Female	2	1	2	1	1	—	1	—	—	—	—	—
145 Puerperal septicaemia (not specified as consequent upon abortion)	Female	—	1	2	1	3	2	2	3	2	—	—	3
146 Puerperal albuminuria and eclampsia	Female	1	1	—	1	1	2	1	—	—	2	—	2
147 Other toxæmias of pregnancy	Female	—	—	—	1	2	—	2	1	1	2	1	—

[illegible]

VITAL STATISTICS BRANCH

TABLE 19.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931.—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
(b) Spina bifida and meningocoele	Male ... Female ... Total ...	1 3 4	1 2 3	1 2 3	— 4 3	1 1 2	— 4 3	2 2 4	1 — —	2 4 1	1 1 —	1 1 —	1 6 1
(c) Congenital malformations of the heart.....	Male ... Female ... Total ...	2 18 20	2 18 20	2 18 20	3 18 21	3 18 21	3 18 21	3 18 21	— — —	1 1 —	1 1 —	1 1 —	1 1 —
(d) Monstrosities	Male ... Female ... Total ...	— 1 1	— 1 1	— 1 1	— 1 1	— 1 1	— 1 1	— 1 1	— — —	— — —	— — —	— — —	— — —
(e) Others under this title	Male ... Female ... Total ...	— 18 18	1 11 12	4 11 15	4 11 15	1 11 12	2 11 13	2 11 13	2 2 4	1 1 2	1 1 2	3 1 4	1 1 2
CLASS XV.—DISEASES OF EARLY INFANCY	Total ...	55	34	51	50	64	44	44	41	26	45	40	38
158 Congenital debility	Male ... Female ... Total ...	24 29 53	16 22 38	30 37 67	22 27 49	37 44 81	29 37 66	29 37 66	23 33 56	12 14 26	27 31 58	19 21 40	21 21 42
159 Premature birth	Male ... Female ... Total ...	13 164 177	8 13 21	19 13 32	10 17 27	19 16 35	14 11 25	14 11 25	15 11 26	6 9 15	6 7 13	3 13 16	3 13 16
160 Injury at birth	Male ... Female ... Total ...	5 33 38	5 33 38	3 33 36	6 33 39	6 33 39	3 33 36	3 33 36	— — —	3 3 6	3 3 6	2 1 3	2 1 3
(a) With record of caesarean operation	Male ... Female ... Total ...	1 1 2	1 1 2	— — —	3 3 6	1 1 2	— — —	— — —	1 1 2	1 1 2	1 1 2	1 1 2	— — —
(b) Without record of caesarean operation	Male ... Female ... Total ...	4 32 36	5 32 37	3 32 35	3 32 35	6 32 38	3 32 35	3 32 35	— — —	3 3 6	3 3 6	2 1 3	2 1 3
161 Other diseases peculiar to early infancy	Male ... Female ... Total ...	4 51 55	5 46 51	7 46 53	6 46 52	6 46 52	8 46 54	6 46 52	5 5 10	1 1 2	3 1 4	2 2 4	2 1 3
(a) Atelectasis	Male ... Female ... Total ...	1 9 10	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 1 2	1 1 2	1 1 2	1 1 2	1 1 2
(b) Icterus of the new-born	Male ... Female ... Total ...	1 3 4	1 2 3	2 2 4	— — —	2 2 4	1 1 2	2 1 3	1 1 2	— — —	1 1 2	— — —	— — —
(c) Sclerema and oedema	Male ... Female ... Total ...	— 1 1	— 1 1	— 1 1	1 1 2	— — —	— — —	— — —	1 1 2	— — —	— — —	— — —	— — —
(d) Athrepsia (3 months and under)	Male ... Female ... Total ...	— 2 2	— 17 17	— 22 22	— 3 3	— 4 4	— 4 4	— 4 4	— 1 1	— — —	— — —	— — —	— — —
(e) Others, including lack of care.....	Male ... Female ... Total ...	1 22 23	1 22 23	1 22 23	2 3 5	2 4 6	4 3 7	4 3 7	1 1 2	— — —	1 1 2	1 1 2	1 1 2
(f) Unspecified causes (under 3 months)	Male ... Female ... Total ...	3 13 16	3 13 16	3 13 16	2 3 5	2 3 5	2 3 5	2 3 5	1 1 2	1 1 2	1 1 2	1 1 2	1 1 2

[illegible]

VITAL STATISTICS BRANCH

TABLE 19—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1931—Continued

CAUSES OF DEATH	Total	Months											
		January	February	March	April	May	June	July	August	September	October	November	December
179 Other acute accidental poisonings (except by gas).....	Male 7	—	1	1	1	—	—	2	—	1	—	—	1
180 Conflagration	Female 1	—	—	—	—	—	—	—	—	—	—	—	1
181 Accidental burns (conflagration excepted)	Male 7	1	—	1	1	—	3	1	1	—	—	1	1
182 Accidental mechanical suffocation	Female 7	—	—	—	—	—	2	—	—	—	1	—	—
183 Accidental drowning	Male 16	2	1	3	—	2	1	—	1	2	—	1	2
184 Accidental injury by firearms	Female 11	1	2	1	—	1	2	—	1	1	—	1	1
185 Accidental injury by cutting or piercing instruments.....	Male 5	1	2	1	1	9	8	16	6	2	3	—	—
186 Accidental injuries resulting from falling, crushing or landslide	Female 49	1	1	1	1	1	4	5	2	1	—	—	—
187 Injuries inflicted by animals	Male 15	—	—	—	—	—	—	—	2	3	4	—	4
188 Hunger or thirst	Female 20	4	—	1	2	—	—	—	1	—	—	1	—
189 Excessive cold	Male 3	1	—	—	—	—	—	2	—	—	—	—	—
190 Excessive heat	Female 3	—	—	—	—	—	—	—	—	—	—	—	—
191 Lightning	Male 161	12	17	5	11	10	16	8	16	12	27	17	10
192 Accidental electric shocks	Female 20	2	2	1	1	1	1	1	1	—	6	3	3
193 Other accidents	Male 14	—	1	2	—	2	1	—	2	1	3	—	2
194 Capital punishment	Female 1	—	—	—	—	—	—	—	—	—	1	—	—
195 Excessive cold	Male 1	—	—	—	—	—	—	—	—	—	—	—	—
196 Excessive heat	Female 1	—	—	—	—	—	—	—	—	—	—	—	—
197 Lightning	Male 2	—	—	—	—	—	1	2	—	—	—	—	—
198 Accidental electric shocks	Female 1	—	—	—	—	—	—	—	—	—	—	—	—
199 Other accidents	Male 1	—	—	—	—	—	1	—	—	—	—	—	—
200 Capital punishment	Female 12	—	—	1	1	1	1	—	—	—	2	3	—
201 Other accidents	Male 3	—	—	1	—	—	—	—	—	—	—	—	—
202 Capital punishment	Female 5	—	—	1	—	—	3	—	1	—	—	—	—

[illegible]

	Male	Female	Total
(e) Of the bones and joints	2	1	3
(f) Of the brain	3	1	4
(g) Of the spine and spinal cord	1	1	2
(h) Of the neck	1	1	2
(i) Of other specified organs	2	1	3
54 Non-malignant tumours	5	1	6
(a) Of the ovary	1	1	2
(b) Of the uterus	2	1	3
(c) Of the thyroid gland	1	1	2
(g) Of other sites	1	1	2
CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES.	26	11	37
56 Acute rheumatic fever	2	1	3
57 Chronic rheumatism, osteo-arthritis	1	1	2
59 Diabetes mellitus	2	1	3
63 Rickets	2	1	3
65 Diseases of the pituitary gland	1	1	2
66 (a) Simple goitre	2	1	3
(b) Exophthalmic goitre	2	1	3
67 Diseases of the thymus gland	1	1	2
69 (a) Fatty or amyloid degeneration	1	1	2
CLASS IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS	10	7	17
71 (a) Pernicious anaemia	3	1	4

[illegible]

CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM...		Total	102	27	2	1	—	2	6	1	3	6	7	7	9	8	2	5	5	2	3
		Male	67	14	2	1	—	1	1	—	3	—	—	—	—	—	—	—	—	—	—
		Female	35	13	—	—	—	1	5	1	—	—	—	—	—	—	—	—	—	—	—
115	(a) Diseases of the buccal cavity and annexa...	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Diseases of the tonsils	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(c) Others under this title	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
117	(a) Ulcer of the stomach	Male	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Ulcer of the duodenum	Male	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
119	Diarrhoea and enteritis (under 2 years of age)	Male	13	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
121	Appendicitis	Male	19	2	—	—	—	—	1	—	2	2	2	2	2	—	—	—	—	—	—
		Female	11	1	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—
		Male	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
122	(a) Hernia	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Intestinal obstruction	Female	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
123	Other diseases of the intestines	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
124	(b) Cirrhosis of the liver (non-alcoholic)	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
125	(b) Other diseases of the liver	Male	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
126	Biliary calculi	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
127	Other diseases of the gall-bladder and biliary passages	Male	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM		Total	42	—	—	1	—	1	—	—	—	1	2	1	2	4	2	7	7	6	—
		Male	30	—	—	1	—	1	—	—	—	—	1	1	2	3	1	4	7	4	5
		Female	12	—	—	—	—	—	—	—	—	—	—	—	—	1	1	3	—	—	—
130	Acute nephritis (including unspecified, under 10 years of age)	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
131	Chronic nephritis	Male	14	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
132	Nephritis not specified (10 years and over)	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
133	Other diseases of the kidneys and annexa	Male	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
134	Calculi of the urinary passages	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION		Total	Male	Female	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
154	Osteomyelitis	Male	Female	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
155	Other diseases of the bones (tuberculosis excepted)	Male	Female	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
CLASS XIV.—CONGENITAL MALFORMATIONS		Total	Male	Female	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
157	(a) Congenital hydrocephalus	Male	Female	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87														

[illegible]

TABLE 21.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY IN EDMONTON, 1931—Continued

CAUSES OF DEATH	Total	Conjugal Condition								Nativity				
		Under 15 yrs.	Single				Married			Widowed	Canada	British	Nativity	
			15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	Foreign							
							United States	Other						
(d) Of the liver and biliary ducts	Male Female 4	1	—	—	1	—	—	1	—	2	1	—	—	—
(g) Of other organs	Male Female 5	—	—	—	1	—	—	2	1	3	1	—	—	1
47 Cancer of the respiratory organs.....Sub-total	Male Female 3	—	—	—	—	—	—	2	4	2	4	—	—	—
(b) Of the lung	Male Female 2	—	—	—	—	—	—	1	1	2	1	—	—	—
(c) Of the mediastinum	Male Female 1	—	—	—	—	—	—	1	—	1	1	—	—	—
48 Cancer of the uterus	Male Female 12	—	—	—	—	—	—	5	2	2	3	4	1	3
(a) Of the uterus	Female 10	—	—	—	—	—	—	5	1	2	2	4	—	3
(b) Of the cervix uteri	Female 2	—	—	—	—	—	—	—	1	—	1	1	—	—
Cancer of other female genital organs	Female 1	—	—	—	—	—	—	1	—	—	—	—	—	1
50 Cancer of the breast	Male Female 12	—	—	—	—	1	—	1	7	1	2	4	5	2
51 Cancer of the male genito-urinary organs.....Sub-total	Male 2	—	—	—	—	—	—	—	2	2	1	2	1	1
(b) Of the kidney	Male 3	—	—	—	—	—	—	—	1	1	—	1	—	1
(c) Of the prostate gland	Male 2	—	—	—	—	—	—	—	1	1	1	1	1	—
52 Cancer of the skin	Male Female 2	—	—	—	—	—	—	—	—	1	1	1	1	—
53 Cancer of other or not specified organs.....Sub-total	Male Female 10	1	1	—	1	—	—	2	2	1	2	6	2	1
(c) Of the lymphatic system	Male Female 5	—	—	—	1	—	—	1	2	1	2	1	1	1
(d) Of the female urinary organs	Female 3	—	—	—	—	—	—	1	1	—	1	2	2	1
	Female 1	—	—	—	—	—	—	—	—	—	—	1	—	—

TABLE 21.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY IN EDMONTON, 1931—Continued

CAUSES OF DEATH		Total	Conjugal Condition										Nativity			
			Single					Married					Canada	British	United States	Other
			Under 15 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	Widowed				
72 (a) Leukaemia	Male	2	—	1	—	—	—	—	—	1	—	—	—	1	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Aleukaemia (Hodgkin's disease)	Male	2	—	—	1	—	—	—	—	—	—	—	1	1	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS V.—CHRONIC POISONINGS AND INTOXICATIONS																
75 (b) Acute alcoholism	Total	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—
	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—
CLASS VI.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																
78 Encephalitis (non-epidemic)	Total	35	8	3	2	1	2	—	2	4	5	8	22	9	—	4
	Male	20	4	1	2	1	1	—	2	2	3	4	10	6	—	4
	Female	15	4	2	—	—	1	—	—	2	2	4	12	3	—	—
79 Simple meningitis	Male	2	—	—	—	—	—	—	—	—	—	—	2	—	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
81 Other diseases of the spinal cord	Male	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
	Female	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
82 (a) Cerebral haemorrhage	Male	3	1	—	—	—	—	—	—	1	1	1	2	2	1	1
	Female	7	—	—	—	—	—	—	—	—	2	2	3	3	—	—
(b) Cerebral embolism or thrombosis	Male	6	—	—	1	—	1	—	—	1	2	2	4	2	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—
(c) Softening of the brain	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Hemiplegia and other paralysis, cause not specified	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 Epilepsy	Male	2	—	—	1	—	—	—	—	—	—	—	1	1	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
86 Convulsions (under 5 years of age)	Male	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
87 (d) Disseminated sclerosis	Male	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1

(e) Other diseases of the nervous system.....	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(a) Diseases of the mastoid process	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(b) Diseases of the mastoid process	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(c) Diseases of the mastoid process	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(d) Diseases of the mastoid process	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
(e) Other diseases of the nervous system.....	Male	Female	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59																																									

[illegible]

CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM.

130	Acute nephritis (including unspecified, under 10 years of age)
131	Chronic nephritis
132	Nephritis not specified (10 years and over)
133	Other diseases of the kidneys and annexa
134	Calculi of the urinary passages
135	Diseases of the bladder (tumours excepted)
136	(a) Stricture of the urethra
137	Diseases of the prostate

TABLE 21.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY IN EDMONTON, 1931—Continued

CAUSES OF DEATH	Total	Conjugal Condition										Nativity					
		Under 15 yrs.	Single					Married				Widowed	Canada	British	Foreign		
			15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	United States				Other		
CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE	Total	13												7	2	3	1
140 Abortion with septic conditions	Female	3															1
141 Abortion without mention of septic conditions (haemorrhage included)	Female	1												1			
145 Puerperal septicaemia (not specified as consequent upon abortion)	Female	4												4			
146 Puerperal albuminuria and eclampsia	Female	1													1		
147 Other toxæmias of pregnancy	Female	3													3	1	1
148 Puerperal phlegmasia alba dolens, embolism or sudden death (not specified as septic)	Female	1													1		
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE	Total	4	2													2	
	Male	3	1													1	
	Female	1	1														
152 Cellulitis acute abscess	Male	2														2	
	Female	1	1														
153 Other diseases of the skin and annexa and of the cellular tissue	Male	1	1														
	Female																
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION	Total	4	2														
	Male	3	2														
	Female	1															
154 Osteomyelitis	Male	2															
	Female																
155 Other diseases of the bones (tuberculosis excepted)	Male	1															
	Female	1															

CLASS XIV.—CONGENITAL MALFORMATIONS									
Total	21	20	11	10	10	10	10	10	10
Male	10	10	10	10	10	10	10	10	10
Female	10	10	10	10	10	10	10	10	10
157 (a) Congenital hydrocephalus	2	2	—	—	—	—	—	—	—
Female	—	—	—	—	—	—	—	—	—
(b) Spina bifida and meningocele	1	1	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	—	—	—	—	—	—	—	—	—
(c) Congenital malformations of the heart	8	7	1	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	8	7	1	—	—	—	—	—	—
(e) Others under this title	3	3	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	4	4	—	—	—	—	—	—	—
Total	63	63	—	—	—	—	—	—	—
Male	34	34	—	—	—	—	—	—	—
Female	29	29	—	—	—	—	—	—	—
CLASS XV.—DISEASES OF EARLY INFANCY									
158 Congenital debility	1	1	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	3	3	—	—	—	—	—	—	—
159 Premature birth	26	26	—	—	—	—	—	—	—
Male	17	17	—	—	—	—	—	—	—
Female	9	9	—	—	—	—	—	—	—
160 Injury at birth	3	3	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	3	3	—	—	—	—	—	—	—
161 Other diseases peculiar to early infancy	4	4	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	6	6	—	—	—	—	—	—	—
Total	2	2	—	—	—	—	—	—	—
(a) Atelectasis	—	—	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	—	—	—	—	—	—	—	—	—
(c) Sclerema and oedema	1	1	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	4	4	—	—	—	—	—	—	—
(e) Others, including lack of care	3	3	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	3	3	—	—	—	—	—	—	—
CLASS XVI.—SENILITY									
Total	5	5	—	—	—	—	—	—	—
Male	4	4	—	—	—	—	—	—	—
Female	1	1	—	—	—	—	—	—	—
162 (a) Senility with senile dementia	1	1	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	—	—	—	—	—	—	—	—	—
(b) Without senile dementia (70 years and over)	3	3	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	1	1	—	—	—	—	—	—	—
CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS									
Total	63	11	7	10	4	1	—	—	—
Male	50	6	7	9	3	1	—	—	—
Female	13	5	—	1	1	—	—	—	—
163-171 Suicides	13	—	—	2	2	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	1	—	—	—	—	—	—	—	—
163 Suicide by solid or liquid poisons or by absorption of corrosive substances	2	—	—	—	—	—	—	—	—
Male	—	—	—	—	—	—	—	—	—
Female	1	—	—	—	—	—	—	—	—

TABLE 21.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY IN EDMONTON, 1931—Continued

CAUSES OF DEATH	Total	Conjugal Condition								Nativity					
		Under 15 yrs.	Single				Married				Canada	British	United States	Other	
			15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over					
165 Suicide by hanging or strangulation	Male Female 2	—	—	—	—	—	—	—	—	—	1	—	—	—	2
166 Suicide by drowning	Male Female 4	—	—	—	—	—	—	—	—	—	1	1	—	—	—
167 Suicide by firearms	Male Female 1	—	—	—	—	—	—	—	—	—	2	1	—	—	1
168 Suicide by cutting or piercing instruments	Male Female 37	—	—	—	—	—	—	—	—	—	1	—	—	—	—
176-198 Accidental deaths	Male Female 12	6	7	7	1	1	—	4	5	5	16	8	4	9	3
179 Other acute accidental poisonings (except by gas)	Male Female 1	5	1	1	1	—	—	3	—	—	8	1	—	1	—
180 Conflagration	Male Female 4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
181 Accidental burns (conflagration excepted)	Male Female 2	2	1	1	—	—	—	1	—	—	2	1	—	—	2
183 Accidental drowning	Male Female 1	1	1	—	—	—	—	—	—	—	1	1	—	—	—
184 Accidental injury by firearms	Male Female 4	1	1	1	—	—	—	1	—	—	2	1	—	—	2
186 Accidental injuries resulting from falling, crushing or landslide	Male Female 5	2	6	4	1	—	—	1	4	5	10	6	4	4	4
188 Injuries inflicted by animals	Male Female 2	—	—	2	—	—	—	2	—	—	3	1	1	1	1
194 Other accidents	Male Female 3	1	—	—	—	—	—	1	1	—	2	—	—	—	—
CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH	Total Male Female 2	—	—	—	1	—	—	1	—	—	1	1	—	1	1
199 Sudden death	Male Female 2	—	—	—	—	—	—	1	—	—	1	—	—	—	1

CAUSES OF DEATH

CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH

	Male	Female	Total
16 Poliomyelitis and polioencephalitis (acute)	1	—	1
17 Epidemic or lethargic encephalitis	—	—	—
18 Epidemic cerebrospinal meningitis	1	—	1
22 Tetanus	3	—	3
23-32 Tuberculosis	1	—	1
Total	30	5	35
23 Tuberculosis of the respiratory system.....	20	2	22
24 Tuberculosis of the meninges and central nervous system..	14	2	16
25 Tuberculosis of the intestines and peritoneum.....	3	1	4
26 Tuberculosis of the vertebral column	—	—	—
27 Tuberculosis of the joints	—	—	—
30 Tuberculosis of the genito-urinary system	2	—	2
32 Disseminated tuberculosis	1	—	1
34 Syphilis	1	—	1
35 Gonococcus infection and other venereal diseases.....	—	—	—
36 Purulent infection, septicaemia (non-puerperal)	8	1	9
43 Mycoses	8	—	8
CLASS II.—CANCER AND OTHER TUMOURS	105	10	115
Total	52	6	58
Female	53	4	57
45-53 Cancer and other malignant tumours..... Total	52	6	58
45 Cancer of the buccal cavity and pharynx	48	4	52
46 Cancer of the digestive tract and peritoneum ...Sub-total	2	1	3
(a) Of the oesophagus	30	1	31
(b) Of the stomach and duodenum	18	1	19
(c) Of the rectum	2	—	2
(d) Of the liver and biliary ducts	16	1	17
Female	8	1	9
Male	8	—	8
Total	16	1	17

[illegible]71 (a) Pernicious anaemia

89	(b) Diseases of the mastoid process	Male Female	2 1	15	7	9	8	14	1	13	12	11	13	11	1	8
CLASS VII.—DISEASES OF THE CIRCULATORY SYSTEM																
90-95	Diseases of the heart	Total Male Female	137 84 53	15	7	9	8	14	1	13	12	11	13	11	16	6
92	Chronic endocarditis, valvular diseases	Male Female	58 42	7 5	4 2	4 1	3 3	4 4	—	8 2	7 2	3 1	5 1	3 5	5 8	2
	(a) Endocarditis specified as chronic and other valvular diseases of the heart	Male Female	13 8	2 1	1 —	1 —	2 2	1 1	—	1 1	2 2	1 1	1 1	1 1	1 1	1
	(b) Endocarditis, unspecified, 45 years and over	Male Female	12 6	2 1	1 —	1 —	2 2	1 —	—	2 1	1 1	—	—	—	1 —	—
93	Diseases of the myocardium	Total Male Female	22 16	3 3	2 2	2 —	1 1	2 1	—	2 1	2 1	2 —	2 —	1 2	3 3	2
	(a) Acute myocarditis	Male Female	1 —	—	—	—	—	1 —	—	1 —	—	—	—	—	—	—
	(b) Myocarditis, unspecified, under 45 years of age	Male Female	2 —	—	1 —	1 —	—	—	—	—	—	—	—	—	—	—
	(c) Chronic myocarditis and myocardial degeneration	Male Female	14 14	3 3	1 —	1 —	1 —	2 1	—	1 1	1 1	2 —	2 —	2 1	2 1	1
	(d) Myocarditis, unspecified, 45 years and over	Male Female	5 2	—	1 —	—	1 —	—	—	—	1 —	—	—	—	1 —	—
94	Diseases of the coronary arteries and angina pectoris	Total Male Female	18 13	1 —	1 —	1 —	2 1	3 1	—	3 1	2 2	2 1	1 —	2 2	1 2	1
	(a) Diseases of the coronary arteries	Male Female	13 2	—	—	—	1 —	1 —	—	—	—	—	—	—	—	—
	(b) Embolism and thrombosis of coronary arteries	Male Female	11 12	1 —	1 —	1 —	1 —	—	—	2 —	1 2	1 1	1 —	2 2	1 2	—
	(c) Angina pectoris	Male Female	5 1	—	—	1 —	—	—	—	1 —	1 —	1 —	—	—	—	1
95	Other diseases of the heart	Total Male Female	5 5	1 1	1 —	—	—	—	—	1 —	1 —	—	1 —	—	3 —	—
	(a) Functional diseases of the heart	Male Female	1 —	1 —	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Others not specified	Male Female	5 4	1 —	1 —	—	—	—	—	1 —	1 —	—	1 —	—	3 2	—
96	Aneurysm (other than of the heart)	Male Female	7 —	—	1 —	1 —	—	2 —	—	—	—	—	—	—	—	—
97	Arteriosclerosis (of coronary arteries excepted)	Male Female	11 7	2 1	1 —	1 —	2 —	1 —	—	1 —	—	2 1	2 —	1 2	—	—
98	Gangrene	Male Female	1 —	—	—	—	—	—	—	—	—	—	—	—	—	—
99	Other diseases of the arteries	Male Female	1 —	—	—	—	—	—	—	—	—	—	—	—	—	—
101	Diseases of the lymphatic system (lymphangitis, etc.)	Male Female	1 —	—	—	—	—	—	—	1 —	—	—	—	—	—	—

[illegible]

CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE

140 Abortion with septic conditions

[illegible]

TABLE 22—CAUSES OF DEATH FOR EACH SEX BY MONTHS, IN EDMONTON, 1931—Continued

CAUSES OF DEATH	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
168 Suicide by cutting or piercing instruments	Male ... Female ...	1	—	—	—	—	—	—	—	—	—	—	—
176-198 Accidental deaths	Male ... Female ...	7 12	1 —	1 2	3 —	2 1	3 4	2 1	4 —	3 —	3 —	2 1	6 2
179 Other acute accidental poisonings (except by gas)	Male ... Female ...	—	—	—	—	—	—	—	—	—	—	—	1
180 Conflagration	Male ... Female ...	—	—	—	—	—	3	1	—	1	—	—	—
181 Accidental burns (conflagration excepted)	Male ... Female ...	—	—	1	—	—	1	—	—	—	—	—	—
183 Accidental drowning	Male ... Female ...	—	—	—	—	—	1	—	—	—	—	—	—
184 Accidental injury by firearms	Male ... Female ...	3	—	—	—	—	—	—	—	—	—	—	1
186 Accidental injuries resulting from falling, crushing or landslide	Male ... Female ...	4 5	1 —	—	3	1 1	1	1	4	2	2	1	4
188 Injuries inflicted by animals	Male ... Female ...	—	—	—	—	—	—	—	—	—	1	1	—
194 Other accidents	Male ... Female ...	—	—	1	—	—	—	—	—	—	—	—	—
CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH	Total ... Male ... Female ...	2 2	1 1	—	—	—	—	—	1 1	—	—	—	—
199 Sudden death	Male ... Female ...	1	—	—	—	—	—	—	1	—	—	—	—

[illegible]

	Male	Female	Total
57 Chronic rheumatism, osteo-arthritis	2	9	11
59 Diabetes mellitus	3	3	6
66 (a) Simple goitre	1	1	2
(b) Exophthalmic goitre	1	1	2
(d) Tetany	1	1	2
68 Diseases of the adrenals (Addison's disease).....	2	1	3
CLASS IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS	11	4	15
70 (a) Simple purpura haemorrhagia	1	3	4
71 (a) Pernicious anaemia	1	1	2
(b) Other anaemias	1	1	2
72 (a) Leukæmia	1	1	2
73 Diseases of the spleen	1	1	2
CLASS V.—CHRONIC POISONINGS AND INTOXICATIONS	3	3	6
75 (a) Delirium tremens	2	1	3
(b) Acute alcoholism	1	1	2
CLASS VI.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.	24	12	36
78 Encephalitis (non-epidemic)	1	1	2
79 Simple meningitis	1	1	2
81 Other diseases of the spinal cord	1	1	2
82 (a) Cerebral hæmorrhage	3	6	9
(d) Cerebral embolism or thrombosis	2	2	4

[illegible]

[illegible]

[illegible]

[illegible]

CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM.

[illegible]

TABLE 24.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY IN CALGARY, 1931—Continued

CAUSES OF DEATH		Conjugal Condition										Nativity				Not Stated	
		Total	Single					Married					Canada	British	Foreign		
			Under 15 yrs.	15-24 years	25-44 years	45-64 years	65 years and over	Not stated	15-24 years	25-44 years	45-64 years	65 years and over			United States		Other
(b) Other diseases of the liver.....	Male	1													1		
126 Biliary calculi	Female																
127 Other diseases of the gall-bladder and biliary passages.....	Male	2													1		
128 Diseases of the pancreas	Female	5			1						3	1	1	1	1	2	
129 Peritonitis, cause not specified	Male	1									1				1		
	Female	2													1		
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM.....		Total	52	2	1	2	3	1	1	2	9	19	12	22	24	2	4
130 Acute nephritis including unspecified (under 10 years of age)	Male	35	1	1	1	3	1		1	7	14	6	17	14	2	2	2
	Female	17	1	1						2	5	6	5	10			
131 Chronic nephritis	Male	2		1						1							
132 Nephritis not specified (10 years and over).....	Female	19	1	1	1	2	1		1	4	4	5	10	7	1	1	1
133 Other diseases of the kidneys and annexa	Male	11	1							1	1	4	5	4	5	2	2
134 Calculi of the urinary passages	Female	3				1						1	2	1			
135 Diseases of the bladder (tumours excepted).....	Male	3							1								
136 Diseases of the urethra, urinary abscess, etc.....	Female	2									2		1		1	1	1
137 Diseases of the prostate	Male	1									1	1	1	1			
138 Diseases of the urethra, urinary abscess, etc.....	Female	1															
139 (a) Diseases of the ovary, Fallopian tube and peritoneum	Male	1									1	6		2	5		
(b) Diseases of the uterus	Female	7									1						
	Male	1								1					1		
	Female	1			1												

CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUPERAL STATE

	Total	7	—	—	—	—	—	—	5	2	—	—	—	—	4	2	1	—	—
140 Abortion with septic conditions	Female	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
141 Abortion without mention of septic conditions (haemorrhage included)	Female	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
145 Puerperal septicaemia (not specified as consequent upon abortion)	Female	2	—	—	—	—	—	—	1	—	—	—	—	—	2	—	—	—	—
147 Other toxæmias of pregnancy	Female	2	—	—	—	—	—	—	2	—	—	—	—	—	2	—	—	—	—
149 (a) Caesarean section	Female	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE	Total	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Male	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
152 Cellulitis, acute abscess	Male	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION	Total	3	1	1	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Male	2	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
154 Osteomyelitis	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
156 (a) Diseases of the joints and other organs of locomotion	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS XIV.—CONGENITAL MALFORMATIONS	Total	9	9	—	—	—	—	—	—	—	—	—	—	—	9	—	—	—	—
	Male	6	6	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—
	Female	3	3	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—
157 (a) Congenital hydrocephalus	Male	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Spina bifida and meningocele	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Female	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
(c) Congenital malformations of the heart	Male	2	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
	Female	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
(e) Others under this title	Male	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLASS XV.—DISEASES OF EARLY INFANCY	Total	49	49	—	—	—	—	—	—	—	—	—	—	—	49	—	—	—	—
	Male	26	26	—	—	—	—	—	—	—	—	—	—	—	26	—	—	—	—
	Female	23	23	—	—	—	—	—	—	—	—	—	—	—	23	—	—	—	—
158 Congenital debility	Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Female	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
159 Premature birth	Male	18	18	—	—	—	—	—	—	—	—	—	—	—	18	—	—	—	—
	Female	15	15	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—	—

TABLE 24.—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION AND NATIVITY, IN CALGARY, 1931—Continued

		Total	Conjugal Condition										Nativity			
			Single					Married					Canada	British	United States	Other
			Under 15 yrs.	15-24 years	25-44 years	45-64 years	65 years and over	Not stated	15-24 years	25-44 years	45-64 years	65 years and over				
160	(b) Injury at birth	Male	4	—	—	—	—	—	—	—	—	—	4	—	—	—
		Female	2	—	—	—	—	—	—	—	—	—	2	—	—	—
161	Other diseases peculiar to early infancy.....	Male	4	—	—	—	—	—	—	—	—	—	4	—	—	—
		Female	5	—	—	—	—	—	—	—	—	—	5	—	—	—
	(a) Atelectasis	Male	2	—	—	—	—	—	—	—	—	—	2	—	—	—
		Female	3	—	—	—	—	—	—	—	—	—	3	—	—	—
	(b) Icterus of the new-born	Male	1	—	—	—	—	—	—	—	—	—	1	—	—	—
		Female	1	—	—	—	—	—	—	—	—	—	1	—	—	—
	(c) Others, including lack of care	Male	1	—	—	—	—	—	—	—	—	—	1	—	—	—
		Female	2	—	—	—	—	—	—	—	—	—	2	—	—	—
		Total	7	—	—	—	—	—	—	—	—	—	—	4	1	1
		Male	2	—	—	—	—	—	—	—	—	—	2	2	1	1
		Female	5	—	—	—	—	—	—	—	—	—	—	2	—	—
		Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	2	1	1
		Male	—	—	—	—	—	—	—	—	—	—	—	2	—	—
		Female	4	—	—	—	—	—	—	—	—	—	—	—	—	—
		Total	57	6	7	10	1	—	—	6	13	8	22	17	6	11
		Male	45	5	4	7	1	—	—	5	9	4	18	13	4	9
		Female	12	1	2	—	—	—	—	1	4	4	4	4	2	2
		Male	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Female	13	1	—	3	—	—	—	1	6	2	4	4	1	3
163-171	Suicides	Male	—	—	—	—	—	—	—	—	1	—	—	—	1	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	—	—
163	Suicide by solid or liquid poisons or by absorption of corrosive substances	Male	2	—	—	—	—	—	—	—	2	—	—	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—
165	Suicide by hanging or strangulation	Male	3	—	—	—	—	—	—	1	2	—	—	—	1	1
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—
166	Suicide by drowning	Male	2	—	—	2	—	—	—	—	—	—	—	—	2	—
		Female	1	—	—	—	—	—	—	—	—	—	—	—	1	—
167	Suicide by firearms	Male	4	—	—	1	—	—	—	—	—	—	2	—	—	—
		Female	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CLASS XVI.—SENILITY

- (a) With senile dementia
- (b) Without senile dementia (70 years and over).....

CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS

- 163-171 Suicides
- 163 Suicide by solid or liquid poisons or by absorption of corrosive substances
- 165 Suicide by hanging or strangulation
- 166 Suicide by drowning
- 167 Suicide by firearms

[illegible]

SPECIAL CLASSES OF ACCIDENTAL DEATHS (INCLUDED ALSO IN THE PRECEDING TABLE, CALGARY, 1931)

[illegible]

[illegible]

[illegible]

(b) Embolism and thrombosis of coronary arteries.....	Male	21	2	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM.....									
Total	52	2	1	4	5	5	3	7	6
Male	35	—	—	2	2	3	2	5	4
Female	17	2	1	2	3	—	1	2	2
130 Acute nephritis including unspecified (under 10 years of age)	Male	—	—	—	—	—	—	—	—
	Female	2	—	—	—	—	—	1	—
131 Chronic nephritis	Male	19	—	2	—	3	2	2	3
	Female	11	2	2	2	—	—	1	2
132 Nephritis not specified (10 years and over)	Male	3	—	—	1	—	—	1	—
	Female	—	—	—	—	—	—	—	—
133 Other diseases of the kidneys and annexa	Male	3	—	—	—	—	—	—	—
	Female	2	—	—	—	—	1	—	—
134 Calculi of the urinary passages	Male	1	—	—	—	1	—	—	—
	Female	—	—	—	—	—	—	—	—
135 Diseases of the bladder (tumours excepted)	Male	1	—	—	—	—	—	—	1
	Female	—	—	—	—	—	—	—	—
136 Diseases of the urethra, urinary abscess, etc.....	Male	1	—	—	—	—	—	1	—
	Female	—	—	—	—	—	—	—	—
137 Diseases of the prostate	Male	7	—	—	1	1	—	2	—
	Female	1	—	—	1	—	—	—	—
139 (a) Diseases of the ovary, Fallopian tube and peritoneum	Female	1	—	—	—	—	—	—	—
(b) Diseases of the uterus	Female	1	—	—	—	—	—	1	—
CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE									
Total	7	—	—	—	1	1	1	—	1
140 Abortion with septic conditions	Female	1	—	—	—	—	—	—	—
141 Abortion without mention of septic conditions (haemorrhage included)	Female	1	—	—	—	—	—	—	1
145 Puerperal septicaemia (not specified as consequent upon abortion)	Female	2	—	—	—	1	—	—	—
147 Other toxæmias of pregnancy	Female	2	—	—	—	—	—	—	—
149 (a) Caesarean section	Female	1	—	—	1	—	1	—	—
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE									
Total	2	—	1	—	—	1	—	—	—
Male	2	—	1	—	—	1	—	—	—
Female	—	—	—	—	—	—	—	—	—
152 Cellulitis, acute abscess	Male	2	1	—	—	1	—	—	—
	Female	—	—	—	—	—	—	—	—

TABLE 25.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, IN CALGARY, 1931—Continued

CAUSES OF DEATH	Total	Months											
		January	February	March	April	May	June	July	August	September	October	November	December
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION	Total	3	1										
	Male	2	1										
	Female	1								1			
154 Osteomyelitis	Male	1						1					
	Female	1											
156 (a) Diseases of the joints and other organs of locomotion	Male	1								1			
	Female												
CLASS XIV.—CONGENITAL MALFORMATIONS	Total	9	2			1	2		1	1	1		1
	Male	6	1				2		1	1			1
	Female	3	1			1					1		
157 (a) Congenital hydrocephalus	Male	2					1			1			
	Female												
(b) Spina bifida and meningocele	Male	1											1
	Female	2				1					1		
(c) Congenital malformations of the heart	Male	2	1				1						
	Female	1	1										
(e) Others under this title	Male	1							1				
	Female												
CLASS XV.—DISEASES OF EARLY INFANCY	Total	49	4	2	7	3	6	4	5	4	3	3	4
	Male	26	2	2	5	2	4	1	2	2	3	2	2
	Female	23	2	2	2	2	2	3	3	2		1	2
158 Congenital debility	Male												
	Female	1											1
159 Premature birth	Male	18	2		1		2	1	1	1	3	2	2
	Female	15	2	3	1	2	1	3	1	2			1
160 (b) Injury at birth	Male	4		1	1	1	1						
	Female	2								1		1	
161 Other diseases peculiar to early infancy	Male	4		2			1		1	1			
	Female	5	2	1			1		1				
(a) Atelectasis	Male	2	2	1			1		1				
	Female	3	1	1			1		1				

[illegible]

TABLE 28.—NUMBER OF DEATHS BY AGE PERIODS FROM SELECTED CAUSES FOR THE WHOLE PROVINCE, 1931

CAUSES OF DEATH		All Ages	Under 1 yr.	1-4 years	5-9 years	10-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70-79 years	80 years and over
1	Typhoid fever	16	—	1	—	—	2	2	3	4	2	2	—	—
6	Smallpox	1	—	—	—	—	—	1	—	—	—	—	—	—
7	Measles	7	1	5	—	—	—	—	1	—	—	—	—	—
8	Scarlet fever	8	—	4	1	2	—	—	—	—	—	—	—	—
9	Whooping cough	32	23	8	1	—	—	—	—	—	—	—	—	—
10	Diphtheria	25	2	10	7	2	2	3	1	17	1	17	20	13
11	Influenza	186	59	16	9	3	7	7	8	—	2	14	—	—
16	Acute anterior poliomyelitis	8	—	—	—	4	2	—	—	2	2	1	1	—
17	Acute encephalitis	7	—	—	1	3	—	2	—	2	1	—	—	—
18	Lethargic encephalitis	9	—	1	1	3	—	2	1	32	19	26	6	3
23	Meningococcus of the respiratory system	306	21	15	24	16	29	64	51	1	—	—	—	—
24	Tuberculosis of the intestines and peritoneum	33	6	10	7	2	2	4	4	1	2	—	1	—
25	Tubercular meningitis	14	—	2	1	1	3	1	3	4	2	2	—	—
26-32	Tuberculosis of the respiratory system	29	3	1	1	1	5	8	18	75	105	107	93	31
45-53	Other tubercular diseases	441	1	1	2	7	3	4	—	3	—	—	1	—
56	Malignant tumours	25	3	3	2	—	—	—	2	—	—	—	—	—
59	Acute rheumatic fever	10	3	3	2	—	—	—	1	—	—	—	—	—
79	Meningitis	126	1	2	1	—	—	—	2	—	—	—	—	—
82	Cerebral haemorrhage, apoplexy	503	—	1	10	7	—	—	1	10	14	27	45	24
90-93,95	Diseases of the heart	389	—	—	—	—	—	—	—	—	—	—	—	—
94,96-103	Other diseases of the circulatory system	29	13	—	—	—	1	5	21	34	71	107	140	94
106	Bronchitis	410	177	40	5	4	5	10	9	27	65	105	127	50
107-109	Pneumonia (all forms)	62	4	8	2	2	6	2	1	24	26	35	43	8
110-114	Other diseases of the respiratory system	153	141	12	18	15	8	15	12	5	6	11	10	29
119	Diarrhoea and enteritis (under 2 years of age)	132	2	13	18	—	1	—	19	18	14	8	2	8
121	Appendicitis	68	2	—	—	—	—	—	7	14	17	14	7	6
120-127	Diseases of the liver	168	1	8	4	1	—	3	8	18	28	33	46	18
130-131	Nephritis (acute and chronic)	34	—	—	—	—	4	11	14	5	—	—	—	—
140,145	Puerperal septicaemia	53	—	—	—	—	3	13	29	8	—	—	—	—
141-144 &	Other diseases and accidents of pregnancy	636	629	4	2	—	—	—	—	—	—	—	—	—
157-161	Diseases of early infancy and malformations	123	—	—	—	—	—	—	—	—	—	—	—	—
163-171	Suicides	408	13	38	31	21	3	18	24	35	27	13	3	10
173-198	Other violent deaths	801	83	64	17	13	42	59	57	52	39	27	19	73
199-200	Other defined diseases	50	11	9	—	—	20	54	53	84	121	100	119	4
	Ill-defined or unknown						1	1	5	4	8	7	4	—
	Total	5302	1197	275	147	105	158	292	357	476	581	655	692	367

TABLE 30.—MARRIAGES DURING THE YEAR 1931—BY MONTHS

	Months											
	January	February	March	April	May	June	July	August	September	October	November	December
Total	1214	89	63	95	78	109	116	111	96	91	166	120
Edmonton	71	82	68	69	69	101	100	92	82	99	99	114
Calgary	213	17	12	20	11	20	15	13	14	23	31	22
Lethbridge	143	10	9	7	8	8	8	15	16	17	21	9
Medicine Hat	82	5	7	7	6	6	12	5	4	2	10	12
Red Deer	44	3	8	5	—	5	2	4	3	2	5	4
Wetaskiwin	54	5	2	5	1	7	3	6	1	3	7	9
Drumheller	54	5	2	5	1	7	3	6	1	3	7	9
Rural Districts	2353	199	123	166	157	204	224	176	122	177	369	253
Total	5142	378	410	292	374	460	480	422	338	407	708	543

TABLE 31.—MARRIAGES—CONJUGAL CONDITION OF CONTRACTING PARTIES, 1931

	Marriages between											
	Bachelors and			Widowers and			Divorced men and			Percent of bride-grooms who were		
	Bachelors and			Widowers and			Divorced men and			Percent of bride-grooms who were		
	Spinsters	Widows	Divorced	Spinsters	Widows	Divorced	Spinsters	Widows	Divorced	Bachelors	Widows	Divorced
Total Marriages	4462	171	73	198	121	15	69	14	19	91.5	6.5	2.0
Alberta	4462	171	73	198	121	15	69	14	19	91.5	6.5	2.0
Total for Province	5142	378	410	292	374	460	480	422	338	407	708	543

VITAL STATISTICS BRANCH

TABLE 34.—MARRIAGES—DENOMINATIONS OF CONTRACTING PARTIES, 1931

Denomination of Groom	Denomination of Bride																														
	Adventists	Anglicans	Baptists	Brethren	Christians	Christian Science	Church of Christ	Congregationalists	Disciples	Evangelicals	Friends	Greek Catholics	Greek Orthodox	Holiness Movement	Jews	Lutherans	Mennonites	Mormons	Pentecostal	Presbyterians	Protestants	Roman Catholics	Salvation Army	Unitarians	United Brethren	United Church	Oriental religions	No religion	Other sects	Not stated	
Adventists	22	15	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anglicans	667	2315	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Baptists	217	3	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brethren	9	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Christians	22	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Christian Science	13	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Church of Christ	11	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregationalists	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Disciples	25	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Evangelicals	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Friends	265	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Greek Catholics	212	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Greek Orthodox	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Holiness Movement	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jews	611	3	43	24	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lutherans	42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mennonites	88	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mormons	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pentecostal	635	1	123	33	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Presbyterians	107	7	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Protestants	872	1	37	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Roman Catholics	15	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Salvation Army	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unitarians	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
United Brethren	15	5	95	37	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
United Church	1132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oriental religions — (Buddhists, Confucians, Mohammedans, Shintos, Sikhs, Hindus)	5	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No religion	16	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other sects	86	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not stated	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Brides	5142	32663	248	7	18	17	21	—	—	2	23	1	271	210	3	23	571	47	115	28	505	73	936	22	—	14	1192	3	9	84	4

TABLE 35.—DIVORCES BY JUDICIAL DISTRICTS FOR THE YEAR 1931

Judicial Districts	Number of Divorces	Granted to Husband	Granted to Wife
Edmonton	77	39	38
Calgary	64	25	39
Medicine Hat	—	—	—
Lethbridge	8	1	7
Red Deer	3	1	2
Wetaskiwin	1	—	1
Camrose	—	—	—
Stettler	—	—	—
Hanna	—	—	—
Macleod	—	—	—
Peace River	—	—	—
Grande Prairie	1	1	—
Vegreville	2	2	—
Total	156	69	87

DIVORCES IN ALBERTA SINCE THE PASSING OF THE ACT

Year	Granted to Husband	Granted to Wife	Total
1919	3	3	6
1920	74	26	100
1921	53	37	90
1922	80	49	129
1923	57	32	89
1924	66	53	119
1925	59	42	101
1926	79	75	154
1927	83	66	149
1928	91	84	175
1929	77	71	148
1930	64	87	151
1931	69	87	156

VITAL STATISTICS BRANCH

TABLE 36.—BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS), BY MONTHS, 1931

	Total	Months											
		January	February	March	April	May	June	July	August	September	October	November	December
Total for the Province..	708	73	62	78	62	58	58	60	41	49	57	45	65

TABLE 37.—BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS) CLASSIFIED AS LEGITIMATE OR ILLEGITIMATE, 1931

	Total births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total for the Province	708	375	333	608	317	291	100	58	42

TABLE 38.—DEATHS OF INDIAN CHILDREN (EXCLUSIVE OF STILLBIRTHS) FROM CERTAIN SPECIFIED CAUSES IN FIRST YEAR OF LIFE, FOR EACH SEX, 1931

Causes of Death		Total	Male	Female
ALL CAUSES		122	73	49
9 Whooping-cough		3	2	1
11 Influenza		6	2	4
15 Erysipelas		1	1	—
23 Tuberculosis of the respiratory system.....		19	14	5
24 Tuberculosis of the meninges and central nervous system		3	2	1
25-32 Tuberculosis, other forms		2	2	—
34 Syphilis		1	—	1
86 Convulsions		3	2	1
106 Bronchitis		6	5	1
107 Bronchopneumonia		15	9	6
108, 109 Pneumonia		20	12	8
115 Diseases of the buccal cavity and annexa and of the pharynx and tonsils (including adenoid vegetations)		1	1	—
119 Diarrhoea and enteritis		8	6	2
122 Hernia, intestinal obstruction		1	1	—
157 Malformations		2	—	2
158 Congenital debility		7	2	5
159 Premature birth		8	3	5
161 Other diseases peculiar to early infancy.....		7	5	2
176-198 Other external causes		2	1	1
Other specified causes		2	2	—
199, 200 Unspecified or ill-defined causes		5	1	4

[illegible]

	Male	Female	Total
134 Calculi of the urinary passages	1	—	1
139 (c) Diseases of the breast	1	—	1
CLASS XI.—DISEASES OF PREGNANCY, CHILD BIRTH AND THE PUERPERAL STATE	4	—	4
141 Abortion without mention of septic conditions (haemorrhage included)	1	—	1
145 Puerperal septicaemia (not specified as consequent upon abortion)	2	—	2
149 (b) Dystocia	1	—	1
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION	1	—	1
156 (a) Of the joints (tuberculosis and rheumatism excepted)	1	—	1
CLASS XIV.—CONGENITAL MALFORMATIONS	2	2	4
157 (a) Congenital hydrocephalus	1	—	1
(b) Spina bifida and meningocele	1	—	1
CLASS XV.—DISEASES OF EARLY INFANCY	22	10	32
158 Congenital debility	2	—	2
159 Premature birth	5	—	5
161 Diseases peculiar to early infancy (unspecified)	5	—	5
CLASS XVI.—SENILITY	6	4	10
162 (b) Without senile dementia (70 years and over)	4	—	4

TABLE 40.—BIRTH, MARRIAGE, DEATH, AND OTHER RATES PER 1,000 POPULATION FOR THE YEARS 1916-1931

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Birth Rate	27.87	27.01	25.72	23.95	26.72	27.89	26.44	25.75	24.74	25.02	23.79	24.03	24.79	26.19	26.74	23.57
Marriage Rate	8.53	8.54	6.98	7.90	8.24	7.92	6.99	6.09	7.50	7.27	7.40	7.58	9.12	9.29	8.08	7.02
Death Rate	8.18	8.09	13.86	9.33	9.15	8.39	8.62	8.06	8.30	7.86	8.49	8.16	9.00	9.65	8.33	7.24
Rate of Natural Increase	18.69	18.92	11.86	14.62	17.57	19.50	17.83	18.75	16.42	16.16	15.31	15.87	15.79	16.54	18.41	16.32
Infantile Death Rate (per 1,000 births)	90.50	87.30	107.10	110.30	93.70	85.65	91.93	90.54	82.40	72.90	81.63	74.51	76.50	77.40	63.57	69.38
Puerperal Death Rate (per 1,000 births)	7.20	6.48	5.51	6.44	8.38	7.24	6.68	5.50	6.18	5.76	5.82	6.38	6.75	7.26	6.46	5.04

TABLE 41.—DEATHS AND DEATH RATES FROM PUERPERAL CONDITIONS, 1931

	Births	Deaths from Puerperal Conditions	Death Rate per 1,000 Births
Whole Province	17,252	87	5.04
City of Edmonton	2,400	13	5.42
City of Calgary	1,886	7	3.71
Small Cities	1,460	12	8.22
Rural Districts	11,566	55	4.78

VITAL STATISTICS BRANCH

TABLE 42.—VITAL STATISTICS, 1905 TO 1931 INCLUSIVE

Year	Births	Marriages	Deaths	Excess of Births over Deaths
1905	421	187	114	307
1906	3,003	927	1,091	1,912
1907	4,732	1,907	1,578	3,154
1908	5,973	2,032	2,188	3,785
1909	6,897	2,384	2,662	4,235
1910	8,321	3,086	3,526	4,705
1911	8,813	3,630	3,618	5,195
1912	10,284	4,429	4,232	6,052
1913	11,871	5,053	4,432	7,439
1914	13,685	4,623	4,147	9,538
1915	13,452	4,202	3,588	9,864
1916	13,331	4,230	4,058	9,273
1917	13,576	4,270	4,047	9,529
1918	14,890	4,048	7,924	6,966
1919	14,130	4,718	5,507	8,623
1920	16,565	5,110	5,675	10,890
1921	16,414	4,661	4,940	11,474
1922	16,163	4,272	5,281	10,882
1923	15,153	4,117	4,843	10,320
1924	14,598	4,160	4,907	9,691
1925	15,014	4,363	4,717	10,297
1926	14,455	4,498	5,156	9,299
1927	14,897	4,707	5,059	9,838
1928	15,692	5,776	5,699	9,993
1929	16,924	6,004	6,239	10,685
1930	17,649	5,334	5,396	12,153
1931	17,252	5,142	5,302	11,950

POPULATION, BIRTH, MARRIAGE AND DEATH RATES, 1931

Population	731,605
Birth Rate per 1,000	23.57
Marriage Rate per 1,000	7.02
Death Rate per 1,000	7.24

RATIO OF MALE TO FEMALE BIRTHS, AND OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths
1901	1,081	3.55	1917	1,061	3.25
1902	1,010	2.59	1918	1,069	1.88
1903	1,056	2.95	1919	1,074	2.56
1904	1,118	3.04	1920	1,055	2.92
1905	1,059	3.11	1921	1,055	3.32
1906	1,094	2.07	1922	1,034	3.06
1907	1,075	2.96	1923	1,072	3.13
1908	1,077	2.73	1924	1,036	2.97
1909	1,086	2.59	1925	1,042	3.18
1910	1,065	2.69	1926	1,053	2.80
1911	1,103	2.43	1927	1,065	2.94
1912	1,084	2.43	1928	1,064	2.75
1913	1,053	2.67	1929	1,042	2.71
1914	1,081	3.30	1930	1,027	3.21
1915	1,100	3.47	1931	1,075	3.25
1916	1,063	3.29			

DEATHS OF INFANTS UNDER ONE YEAR, DURING THE YEAR 1931

To 1,000 Births	69.38
To 1,000 Deaths from all Causes	225.76
Number of Stillbirths in Alberta	453

